Cincinnati State
TECHNICAL AND COMMUNITY COLLEGE

Catalog 10 | 11

2010 - 2011 Academic Calendar

Early Fall 2010

Monday, September 6	Labor Day – College closed
Tuesday, September 7	Classes begin
Tuesday, September 7	Instructor consent required to register for a course that has met
Monday, September 13	Last day to drop a course and receive a 100% refund of tuition
Monday, September 13	Last day to register for a course
Monday, September 20	Last day to drop a course and receive a 50% refund of tuition
Monday, September 20	Last day to drop a course without a grade appearing on student's record
Monday, September 20	Last day to declare an Audit in a course
Tuesday, September 21	First day to request a Withdrawal for a course (available online)
Monday, October 25	Last day to Withdraw from a course (available online)
Monday, November 8	Classes end

Late Fall 2010

Thursday, November 11	Veteran's Day – College closed
Tuesday, November 16	Classes begin
Tuesday, November 16	Instructor consent required to register for a course that has met
Monday, November 22	Last day to drop a course and receive a 100% refund of tuition
Tuesday, November 23	Last day to register for a course
Wednesday to Friday, November 24-26	Thanksgiving Holiday – College closed (Classes held Nov. 27 & 28)
Tuesday, November 30	Last day to drop a course and receive a 50% refund of tuition
Tuesday, November 30	Last day to drop a course without a grade appearing on student's record
Tuesday, November 30	Last day to declare an Audit in a course
Wednesday, December 1	First day to request a Withdrawal for a course (available online)
Friday to Sunday, December 24, 2010 to January 2, 2011	Winter Break – College closed
Monday, January 17	Last day to Withdraw from a course (available online)
Monday, January 17	Martin Luther King Jr. Day – College closed
Monday, January 31	Classes end

Winter 2011

Monday, February 7	Classes begin
Monday, February 7	Instructor consent required to register for a course that has met
Friday, February 11	Last day to drop a course and receive a 100% refund of tuition
Friday, February 11	Last day to register for a course
Friday, February 18	Last day to drop a course and receive a 50% refund of tuition
Friday, February 18	Last day to drop a course without a grade appearing on student's record
Friday, February 18	Last day to declare an Audit in a course
Saturday, February 19	First day to request a Withdrawal for a course (available online)
Monday, February 21	President's Day – College closed
Monday, March 28	Last day to Withdraw from a course (available online)
Monday, April 11	Classes end

Spring 2011

Monday, April 18	Classes begin
Monday, April 18	Instructor consent required to register for a course that has met
Friday, April 22	Last day to drop a course and receive a 100% refund of tuition
Friday, April 22	Last day to register for a course
Friday, April 29	Last day to drop a course and receive a 50% refund of tuition
Friday, April 29	Last day to drop a course without a grade appearing on student's record
Saturday, April 30	First day to request a Withdrawal for a course (available online)
Monday, May 2	Last day to declare an Audit in a course
Monday, May 30	Memorial Day – College closed
Monday, June 6	Last day to Withdraw from a course (available online)
Monday, June 20	Classes end
Friday, June 24	Graduation Ceremony (tentative)

Summer 2011

Monday, June 27	Classes begin
Monday, June 27	Instructor consent required to register for a course that has met
Friday, July 1	Last day to drop a course and receive a 100% refund of tuition
Monday, July 4	Independence Day - College Closed
Friday, July 1	Last day to register for a course
Friday, July 8	Last day to drop a course and receive a 50% refund of tuition
Friday, July 8	Last day to drop a course without a grade appearing on student's record
Friday, July 8	Last day to declare an Audit in a course
Saturday, July 9	First day to request a Withdrawal for a course (available online)
Monday, August 15	Last day to Withdraw from a course (available online)
Monday, August 29	Classes end

2009 - 2010 Catalog

Cincinnati State Technical and Community College

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Cincinnati State Technical and Community College does not discriminate on the basis of race, age, color, handicap, sexual orientation, national origin, or gender in the admission of students or in any activity conducted by Cincinnati State.

Cincinnati State Technical and Community College is an equal opportunity institution.

Parts or all of this catalog as well as any admissions materials will be provided on tape to disabled individuals upon request.

3520 Central Parkway
Cincinnati, Ohio 45223

(513) 569-1500
Office of Admission: (513) 861-7700

www.cincinnatistate.edu

John L. Henderson, EdD, Interim President

Go ahead. Get there.℠
Cincinnati State
TECHNICAL AND COMMUNITY COLLEGE

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Supervisor, Food Services ..... Peter Wynne

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Client Management Specialists ..... Marianne McCabe
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Business Manager, Professional, Managerial, Leadership,
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DATATEL Analyst ..... Joy Sunderman
Blackboard System Analyst ..... Tracy Prestopino
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Telecommunication Analyst ..... Anthony Philpot
Infrastructure Technician ..... Verden Hembree
Manager of Administrative Technology Support .....Mike Hall
Analyst ..... Uma Gowda
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Senior Programmer/Analyst ..... Nicole Hall
Programmer/Analyst ..... Dorothy Mann
Manager of User Support Services ..... Patricia Edwards
Lead Lab Technicians ..... Eric Hermecz
Senior Lead Lab Technician ..... David Hensley
Lab Technician/Helpdesk ..... Carmine Santoro
Lab Technician/Open Lab ..... David Shives
Telephone/Computer Operator ..... Denise Brown
Manager of Instructional Support Technologies ..... Jim Krailler
Instructional Designer ..... Jon P. McKamey
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Classroom Multimedia Technician ..... Norbert Thomas
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Academic Records Specialist ..... Danielle Hobday
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..... Isabel Brown
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Advising Specialist ..... Bonita Henderson
GEARUP Dropout Prevention Specialist ..... Gwendolyn Menifee
..... Darla Paul-Dixon
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Advising Specialists ..... Omope Dboiku
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Intake Specialist .....Carla Pace
Student Activities Director ..... Brenda Maples-Sterry
Student Activities Assistant Director ..... Marcia Caulton
Executive Assistant ..... Mary Beth Barnes

Environmental and Public Safety
Environmental and Public Safety Director ..... Mike Wylie
Campus Police Officers ..... Michelle Fern
..... Todd Halusek
..... Kay Harrison-Smith
..... Matthew Hill
..... Chester Teetor
..... Jimmy Trotter
..... Mike Varin
Dispatchers ..... Jamal Lundy
..... Dawn Wilke

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Purchasing Card Administrator/Assistnt to VP Finance
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Cashier ..... Dionna Malone
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..... Diane Taft
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Executive Assistant ..... Sandy Ficker
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Trade Crew Coordinator - Maintenance ..... Milissa Zloba
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.....Dave Corso
..... Barry Haering
..... Robin Necessary
..... Matthew Thibodeaux
..... Fred Thompson
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..... Phillip Clay
.....
Environmental Services Manager ..... Tyrone Walton
3rd Shift Trade Crew Coordinator - Environmental Services
..... Michael Douglas
2nd Shift Trade Crew Coordinator - Environmental Services
..... Justin Benjamin

Environmental Services Technicians ..... Sharon Anderson
..... James Ball
..... Bryant Battle
..... Julie Caudill
..... Ruben Irons
..... Anthony Mason, Jr.
..... Jeff McQueen
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..... George Simmons
..... Charles Stokes
..... Sam Streety
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..... Chris Tombs
..... Tony Waite
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..... Kim Vasko
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Acting Associate Dean ..... Michael Chikeleze
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Program Chair ..... Michele Geers
Co-op Coordinator .....
Faculty ..... Yvonne Baker
..... Stani Kantcheva
..... Linda Schaffeld
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Co-op Coordinator ..... Joe Roberts
Faculty ..... Chuck Butler
Management of Technology
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Co-op Coordinator ..... Adam Waits
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Faculty ..... Michael Chikeleze
..... Meg Clark
..... Paul Davis
..... Alicia Revely
..... Sharon White
..... Otis Williams
Hospitality Management Technologies
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..... John Kinsella
..... Paula Kirch Smith
..... Donna Lapasky
..... Betsy LaSorella
..... Jim Myatt
..... Alan Neace
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Faculty ..... Charalee Allen
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Program Chair ..... Gary Walton
Co-op Coordinator ..... Joe Roberts
Faculty ..... Kathy Freed
Landscape Horticulture Technologies
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Co-op Coordinator ..... Joe Roberts
Faculty ..... Heather Wiggins
Greenhouse Manager ..... Elke Hartman
Information Management Technologies
Program Chair ..... Connie Crossley
Co-op Coordinator ..... Adam Waits
Faculty ..... Al Eilers
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..... Viola Johnson
..... Colleen Meyer
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Co-op Coordinator .....
Real Estate Technology
Program Chair ..... Jim Wood
Co-op Coordinator .....

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Executive Assistant ..... Carla Wermuth
Clerical Assistant ..... Linda Gibbons
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Lab Technicians ..... Lawrence Leslie
..... Steven Wells
Associate Dean ..... Connie Sketch
Clerical Assistant ..... Gaile Carroll
Audio/Video Production
Program Chair ..... David Killen
Co-op Coordinator ..... Andrea Feld
Aviation Maintenance Technology
Program Chair ..... James Schmid
Co-op Coordinator ..... Sue Dolan
Faculty ..... Ed Weichold
..... Jeff Wright
Biomedical Equipment & Information Systems Technology
Program Chair ..... Steven J. Yelton, PE
Co-op Coordinator ..... Sue Dolan
Business Information Systems Technology
Program Chair ..... Robert Nields
Co-op Coordinator .....
Faculty ..... Robert Coil
Computer Programming and Database Management
Program Chair ..... Donald Youngpeter, PE
Co-op Coordinator .....
Faculty ..... Patrick Callahan
Chemical Technology
Program Chair ..... Martha Brosz
Co-op Coordinator ..... Sue Dolan

Civil Engineering Technology
Program Chair ..... Tom Burns, PhD, PE
Co-op Coordinator ..... Noelle Grome
Faculty ..... George Armstrong, PE, PS
..... John Buttelwerth
..... James Decker, PS
..... Elias Feghali
..... Carol Morman, PE, PS
..... Ralph Wells
Computer Network Engineering Technology
Program Chair ..... Paul Weingartner, PE
Co-op Coordinator ..... Kathy McClusky
Faculty ..... Robert McLain, PE
Electro-Mechanical Engineering Technology
Program Chair ..... Larry Feist
Co-op Coordinator ..... Kim Richards
Electrical Engineering Technologies
Program Chair ..... Steven J. Yelton, PE
Co-op Coordinator ..... Sue Dolan
Faculty ..... Mike Carroll
..... Bob McLain, PE
..... Larry Morris, PE
..... Linda Pohlgeers
Environmental Engineering Technology
Program Chair ..... Ann Gunkel
Co-op Coordinator ..... Kathy McClusky
Faculty ..... Ann Fallon
Graphic Design
Program Chair ..... Jason Caudill
Co-op Coordinator ..... Andrea Feld
Faculty ..... Joel Knueven
Industrial Design Technology
Program Chair ..... Josh Haldeman, IDSA
Co-op Coordinator ..... Kathy McClusky
Mechanical Engineering Technology
Program Chair ..... Mike DeVore, PE
Co-op Coordinator ..... Kim Richards
Faculty ..... David Simmermon
..... David Smith
Multimedia and Web Design
Program Chair ..... David Hoctor
Co-op Coordinator ..... Andrea Feld
Network Administration
Program Chair ..... Jeff Vetter
Co-op Coordinator ..... Kathy McClusky
PC Support and Administration
Program Chair ..... Steven J. Yelton, PE
Co-op Coordinator .....
Faculty ..... Linda Pohlgeers
Power Systems Engineering Technology
Program Co-Chairs ..... Larry Feist
..... Steven J. Yelton, PE
Co-op Coordinator ..... Sue Dolan
Faculty ..... Mike Carroll
Software Engineering Technology
Program Chair ..... Steven J. Yelton, PE
Co-op Coordinator .....
Faculty ..... Pat Callahan
Technical and Professional Communication Certificate
Certificate Chair ..... Pam Ecker

Health and Public Safety Division
Dean ..... Marianne Krismer, RD, LD
Executive Assistant ..... Cheri Furlong
Associate Dean ..... Jamilah Hackworth
Associate Dean ..... Bessie Pitts, LPC, LSW
Executive Assistant ..... Katy Blanton
Executive Assistant ..... Katie Chiappone
Clerical Assistant .....Ruth Kirtley
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..... Tom Cholmondeley
HCC Grant Manager ..... Lawra Baumann
Health Excel Services Retention Coordinator ..... Lisa Lucas
HPS Grants Coordinator ..... Kesha Williams
..... Patricia McAlpine
Biotechnology
Program Chair ..... Diane Vorbroker
Clinical Laboratory Technology
Program Chair ..... Janelle Gohn, MT(ASCP), SM
Faculty ..... Kellee Fields, MLS (ASCP)
Community Health Worker
Program Chair ..... Mary Kappesser, RN
Diagnostic Medical Sonography
Program Chair ..... Jackie Turner, RDCS, RVT
Clinical Coordinator ..... Shawnya Wilborne, RDMS, RDCS, RVT
Faculty ..... Wendy Skates
Electroneurodiagnostic Technology
Program Chair ..... Debra Carson
Emergency Medical Services Technology
Program Chair ..... William Mehbod, EMT-P
Clinical Coordinator ..... Joshua Borkosky
Lab Manager ..... Wayne Turner
Fire Service Technology
Program Chair ..... Phil Vossmeyer, C, P/F
Lab Manager ..... Terry Doherty
Health & Fitness Technology
Program Chair ..... Jennifer Mayer
Faculty ..... Melinda Piles
Health Information Management
Program Chair ..... Cindy Kneip, RHIA
Faculty .....
Multi-Competency Health Technician
Program Chair ..... Daphne Robinson, RHIT
Program Chair-Medical Assistant Certificate ..... Holly Elliott, RMA
Faculty ..... Sandy Speller, RHIT
Nurse Aide Training Program Coordinator ..... Laurel Alfieri, RN
Nurse Aide Training Assistant Program Coordinator
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Nursing Program
Program Chair/Director ..... Denise Rohr, RN
Program Coordinator/Assistant Director
..... Joanne Johnson, RN
Program Chair NURP ..... Jerelen Hancox, RN, ARNP
Faculty ..... Susan Bacher, RN, CNOR, CRNFA
..... Piper Coleman, RN
..... Janice Curry, RNC
..... Florence Donohue, RNC, CPNP
..... Judith Faessler, RN, SANE/A, CNE
..... Sue Guntzelman, RN, BC
..... Beth Hamon, RN
..... Brenda Heck, RN
..... Roberta Hochmuth, RN, CNE
..... Debra Hying, RNC
..... Sherri Lipscomb, RN, CNE
..... Janice Lockett, RN, RCVT
..... Dan Lozier, RN
..... Alice Palmer, RN, CNE
..... Connie Rose, RN, BC
..... Dorothy Varchol, RN BC
..... Suzanne Zellner, RNC
Advisor ..... Eileen Lanzillotta, RN
Lab Manager ..... Sharon Sawicki, RN
Practical Nursing Certificate
Program Chair/Director ..... Kathy Nicely, RN
Faculty..... Susan Batory, RN
..... Sarajane Blatt, RN
..... Jean Combs, RN
..... Nikki Howard, RN
..... Janet Kroeger, RN
..... Cinda Siekbert, RN
..... Robin Sinex, RN
..... Eileen Stork, RN
Advisor ..... Jennifer Wolf
Administrative Assistant .....

Occupational Therapy Assistant Technology
Program Chair ..... Claudia Miller, OTR/L
Academic Fieldwork Coordinator ..... Cindy Kief, COTA/L, ROH
Orthopaedic Technology
Program Chair ..... Timothy Hill, OT-C
Respiratory Care Technology
Program Chair ..... Debra Lierl, RRT
Clinical Coordinator/Faculty ..... Tom Stormer, RRT
Faculty ..... Mike Chaney, RRT
Medical Director..... Christopher Schmitt
Public Safety Technology
Program Chair ..... Robert Baylor, MA
Clerical Assistnt, SSM, FST, EMT/P ..... Shelette Gibbs
Surgical Technology
Program Chair ..... Wanda Dantzler, RN, CNOR, CRCST
Faculty ..... Susan Bacher, RN, CNOR, CRNFA
..... Katherine Wolfer, RN, CNOR
Biology
Chair ..... Robert Eveslage, RRT
Faculty ..... Dave Bryan
..... Susan Herking
..... Julianna Johns
..... Greg Klein
..... Tom Kober
..... Peggy Rolfsen
..... Diane Vorbroker

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Executive Assistant ..... Annette Clark
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Laboratory Technician ..... Mary Rapaske
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Part-time Advisor ..... Florence Newell
..... Janice Hoeweler
..... Jennifer Martin
Part-time Coordinator .....
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Chair ..... Joyce Rimlinger
Advisor ..... Julie McLaughlin
Early Childhood Care and Education
Chair ..... Crystal Bossard
Faculty ..... Sandra Owen
Interpreter Training
Chair ..... Dawn Caudill
Faculty ..... Tony Merchinsky
..... Cheryl Beatty
Interpreter/ITP Assistant ..... Jessica Haffley
Language Lab Coordinator ..... Diana Hickham
English as a Second Language (ESL)
Faculty ..... Andrea Cheng
Chemistry
Chair ..... James Bronstrup
Faculty ..... Wyatt Cotton
Communication and Theater
Chair ..... Carla Gesell-Streeter
Faculty ..... Gregory Hudson
Humanities and Foreign Languages
Chair ..... Samuel Rowe
Faculty ..... Rosa Maria Moreno
English and Literature
Chair ..... Geoffrey Woolf
Faculty ..... John Battistone
..... David Brown
..... Robert Jakubovic
..... Nancy King
..... Andrea Leslie
.....Tamara Reid McIntosh
..... Chantae Recasner
..... Joyce Rimlinger
..... Alyce Thompson
Mathematics
Co-Chairs ..... Terry Erdmann
..... Scott Freeman
Faculty ..... Amy Dimmerling
..... Mary Frey
..... Larry Gache
..... Scott Horn
..... Richard Swanson
..... William Wunderlich
Physics
Chair .....
Faculty ..... Debra Barrett
..... Edward Sunderhaus
Social and Behavioral Sciences
Chair ..... Paul Davis
Faculty ..... Crystal Bossard
..... Ron Craig
..... Sean Fraley
..... Heather Hatchett
..... Marcha Hunley
..... Jennifer Jackson
..... Jason Jolicoeur
..... Abraham Kuranga
..... Janice Robinson
..... Siamak Salehi

Developmental Education
Mathematics
Chair ..... Linda Knepp
Faculty ..... Thomas Grogan
..... Brad Levy
..... Catherine Orsini
..... Janice Schlaak
Reading/Writing
Faculty/Chairs ..... Laura Attenborough
..... Sandra Buschmann
..... Ryan Shadle
..... Nancy Wright
English as a Second Language
..... Andrea Cheng

General Information

Cincinnati State Technical and Community College

Cincinnati State Technical and Community College is a public, two-year college under the authority of the Ohio Board of Regents. Governed by a nine-member Board of Trustees, the College offers over 75 associate's degree programs and majors and numerous certificate programs. Annually, over 15,000 students enroll in Cincinnati State courses that are offered during the day, in the evening, and on weekends. In addition to its academic and technical programs, the College offers many continuing education opportunities through short courses, seminars, and on-site training for area businesses and industries. The College is fully accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools (30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, phone 800-621-7440) and holds numerous programmatic accreditations.

Mission

Cincinnati State Technical and Community College provides student focused, accessible quality technical and general education, academic transfer, experiential and cooperative education, and workforce development.

Institutional Values

As a College Community…

- We embrace experiential and lifelong learning, personal growth, and employability.
- We create and promote a civil and respectful environment.
- We anticipate and effectively respond to changing stakeholder expectations.
- We honor the diversity of people and ideas.

Vision

Cincinnati State will be the technical and community college of choice in our region, nationally recognized for academic excellence, cooperative education, and workforce development.

Cooperative Education

Since its beginning, Cincinnati State has emphasized the value of integrating cooperative work experience with academic coursework. The College's high graduate employment rate speaks directly to Cincinnati State's commitment to providing quality education enriched by on-the-job training. Students encounter "real-world" job demands, helping to clarify their career choices and to promote independence and responsibility in the workplace. Most co-op experiences are paid placements that permit students to earn while learning, and also to defray the total cost of their education. The College has been recognized nationally for its extensive cooperative education program. Over 600 area employers provide placements for Cincinnati State students who devote at least one term of their program of study to applying the knowledge they have acquired in the lab and in the classroom.

Student-Centered Quality Education

Cincinnati State is also known for its dedication to teaching and its student-centered philosophy and practices. Small class sizes, an extensive developmental education program, a free tutoring program, counseling, and library services provide the kinds of academic support needed for success for both the returning adult student and the recent high school graduate. Both theory and practice are stressed through appropriate classroom, laboratory, and cooperative/clinical education experiences. Each student at Cincinnati State is an individual, not a number.

Cincinnati State instructors take pride in the personal attention afforded to each student, and every Cincinnati State graduate is a reflection of the College's commitment to developing human potential, one student at a time.

Collaborative Relationships

Cincinnati State serves the community by hosting numerous community events throughout the year, and by its many partnerships with area high schools and universities. In addition to the College's extensive cooperative education program described above, Cincinnati State is a member of the Greater Cincinnati Consortium of Colleges and Universities which allows students, under certain conditions, to take courses not offered at their home institution at any of the thirteen member institutions. Students who would like more information about this program should contact the Office of the Registrar, Room 161 Main Building.

Cincinnati State also has a cross-registration agreement with the Army and Air Force ROTC at the University of Cincinnati. Army and Air Force personnel teach General Military Training course classes. Enrollment in these classes entails no service obligation, and books and uniforms for the courses are provided free to students. Participants attend ROTC classes and drill periods on the University of Cincinnati's campus while attending academic classes at Cincinnati State. Details are available in the Office of Veterans Affairs at Cincinnati State, Room 157 Main Building.

Accreditation & Memberships

- Ohio Board of Regents
- Division of Vocational Education, State Department of Education
- Higher Learning Commission of the North Central Association of Colleges and Schools (30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, 800-621-7440)

Professional Accreditations

- Accreditation Council for Occupational Therapy Education
- Accreditation Review Committee on Education in Diagnostic Medical Sonography (in cooperation with Commission on Accreditation of Allied Health Education Programs)
- Accreditation Review Committee on Education in Surgical Technology (in cooperation with Commission on Accreditation of Allied Health Education Programs)
- American Council for Construction Education
- American Culinary Federation Foundation
- City and Guilds of London Institute
- Commission on Accreditation for Dietetics
- Commission on Accreditation for Health and Information Management Education (CAHIIM)
- American Dietetic Association
- Commission on Accreditation of Allied Health Education Programs
- Committee on Accreditation for Respiratory Therapy
- Dietary Managers Association
- Federal Aviation Administration (FAA)Approved Aircraft Maintenance Technician School
- National Automotive Technicians Education Foundation, Inc.
- National Accrediting Agency for Clinical Laboratory Sciences
- National League for Nursing Accrediting Commission, Inc.
- Ohio Department of Public Safety, Department of Emergency Medical Services
- Ohio Division of Real Estate
- Ohio State Board of Nursing
- Professional Landcare Network
- Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET)

Memberships

- Academic Quality Improvement Project
- American Association of Collegiate Registrars and Admission Officers
- American Association of Community Colleges

- American Society for Quality Management
- American Society of Allied Health Professionals
- American Technical Education Association
- Association for the Promotion of Campus Activities
- CincinnatiUSA Chamber of Commerce
- Continuous Quality Improvement Network
- Cooperative Education Association
- Enterprise Ohio Network
- Greater Cincinnati Consortium of Colleges and Universities
- Midwest Cooperative Education & Internship Association
- National Association of College Admission Counseling
- National Association of College and University Business Officers
- National Association of Student Financial Aid Administration
- National Council of Student Development
- National Junior College Athletic Association
- National Network of Health Career Programs in Two-Year Colleges
- Northern Kentucky Chamber of Commerce
- Ohio Association of Community Colleges
- OhioLINK
- OHIONET
- Southwest Ohio Neighboring Libraries
- U.S. Green Building Council
- World Affairs Council
- World Association of Cooperative Education

Admission, Fees, & Financial Aid

Admission Information

Cincinnati State Technical and Community College is an open-access, public institution dedicated to the principles of providing each student the maximum opportunity to develop and learn.

Students who are high school graduates or have a high school equivalence (GED) are eligible for admission to Cincinnati State Technical and Community College.

Upon completion of the admission process, students are admitted to a degree program. Some admitted students may be recommended to participate in prerequisite or developmental education courses. All placements are based on a review of placement test scores and high school (or GED) and college transcripts. All admission placements may lead to an associate's degree or certificate.

Prerequisite or developmental education courses enable students to develop or strengthen important academic skills by taking prescribed classes. A class schedule is designed with an academic advisor to enhance the student's academic success and is based on a student's goal, a review of placement test scores, high school and/or college transcripts, and an academic advising session. Students must complete all prerequisite or developmental education courses in five terms or one calendar year.

Graduation rate information is available at www.cincinnatistate.edu.

Students are advised to begin the admission process at least eight weeks in advance of the term in which they plan to attend Cincinnati State, in order to facilitate the timely transfer of transcript(s) from other school(s), financial aid processing, and academic advising. Submitting applications according to the admission deadlines below ensures the application is processed in a timely manner. Some programs reach their capacity early requiring possible placement on a waitlist.

Meeting the admission date for the desired academic term ensures admission for degree/certificate-seeking applicants, if all required documents are received by the date posted, and no additional follow-up is required.

Important note: Applications for admission and supporting documents will be accepted after the posted dates and processed as received. Applicants will be accepted into the term in which the process has been finalized. Cincinnati State supports an open admission policy based on a five-term rolling admission process.

Summer Term 2011	
Admission Deadline	May 23, 2011
Admitted by	May 31, 2011
Summer term begins	June 27, 2011
Early Fall Term 2011	
Admission Deadline	August 1, 2011
Admitted by	August 8, 2011
Early Fall term begins	September 6, 2011
Late Fall Term 2011	
Admission Deadline	October 10, 2011
Admitted by	October 17, 2011
Late Fall term begins	November 15, 2011
Winter Term 2012	
Admission Deadline	January 2, 2012
Admitted by	January 9, 2012
Winter term begins	February 6, 2012
Spring Term 2012	
Admission Deadline	March 12, 2012
Admitted by	March 19, 2012
Spring term begins	April 16, 2012

Degree and Certificate Applicants

First time students should submit:

- A completed online Application for Admission, available at www.cincinnatistate.edu/apply.
- A $10 non-refundable admission fee, charged to the student's first registration bill.
- An official high school transcript. The transcript must be mailed directly to the Office of Admission. Hand carried, emailed, or faxed copies are not accepted. (High school seniors must submit a final transcript upon graduation.)
- Applicants who are not high school graduates must submit a copy of their General Educational Development (GED) test scores.
- Applicants must complete the COMPASS®/ESL placement test (see Placement Testing on page 18 for details).

Transfer students should submit:

- A completed online Application for Admission, available at www.cincinnatistate.edu/apply.
- A $10 non-refundable admission fee, charged to the student's first registration bill.
- A final official high school transcript copy to the Office of Admission. Note: The high school transcripts requirement is waived for college graduates. Transcripts must be sent directly to Cincinnati State from the issuing institution; hand carried, emailed, or faxed copies are not accepted.
- An official transcript from each college or university from which a student wishes to transfer credits, or request a waiver of the COMPASS®/ESL placement test.
- In addition, transfer students must complete the COMPASS®/ESL placement test (see Placement Testing on page 18 for details).

Returning students should submit:

- Admission documents are maintained for five years after the initial admission date. Admitted students who have not enrolled for five consecutive terms must reapply for admission online, and pay a $10 non-refundable admission fee (charged to the student's first registration bill).
- Students reapplying for admission five years after their prior admission date must resubmit an Application for Admission, resubmit all required documents, and retake the COMPASS® placement test (see Placement Testing on page 18 for details).

Lifelong learners who are not seeking a degree or certificate should submit an online Non-Degree Application available at www.cincinnatistate.edu/admissionforms

User ID and Password

An identification number and password is assigned and sent to each student upon applying to the College. Social security numbers are not used as an identifier for student records. Student-determined passwords allow access to MyServices, the student portal, which serves as the primary source for business communications between the College and the student.

Note:

- An Application for Admission is valid for one year.
- Required documents for admitted students are maintained for five years after the initial admission date.
- All documents submitted to the Office of Admission become the property of Cincinnati State Technical and Community College and will not be returned, forwarded, or copied. Please request this information from the issuing institution.
- Non-degree seeking students are not eligible to receive financial aid.

Change of Major

To change a major after being admitted and enrolled at Cincinnati State, students should process a Change of Major form online at www.cincinnatistate.edu/admissionforms. Students who are uncertain about career options should contact the Counseling Center at (513) 569-1552 to schedule a career counseling appointment.

International Applications

Non-U.S. citizens who have been granted the status of immigrant, permanent resident, or refugee by the Bureau of Citizenship and Immigration Services may be admitted on the same basis as U.S.

citizens. Students in these catagories must provide the Office of Admission a copy of applicable documentation (permanent resident card, visa, I-94, etc.) for the application to be processed.

All other international applicants are required to complete the following no later than two months before the student intends to begin:

- Meet the admission requirements of U.S. citizens, including completion of an Application for Admission.
- Provide proof of proficiency with the English language with a minimum TOEFL score of 500 (paper), 173 (computer-based) or 61 (internet-based), sent directly from the educational testing service. Cincinnati State's school code is 1984.
- Submit an English translation of high school transcripts. If transfering college/university coursework from abroad, students must have transcript(s) translated and evaluated by an official Credential Evaluation Service. (Listing available upon request from the International Student Office.)
- Provide proof of adequate financial support. It is estimated that international students need a minimum of $17,542 per year for tuition, books, living, and miscellaneous expenses. There are no scholarships or educational loans available for international students. Submission of a signed and officiated Certification of Finances Form to the attention of the International Student Advisor is required to verify the availability of sufficient funds to cover the cost of the education while attending Cincinnati State.
- Upon receipt of the above-mentioned documents, and consequent offer of admission, all international students must submit a $3,500 advance tuition deposit fee to the Cashier's Office. This deposit is credited to the individual's account and used only for payment of tuition and fees. The fee covers approximately one and one-half terms of tuition. The student must provide for all other expenses, including room, board, books, transportation, and incidental expenses.

An I-20 Form is issued to the student only after the above -mentioned steps are completed.

For additional information regarding international admission, contact the International Student Advisor at (513) 569-1543, or visit www.cincinnatistate.edu/internationalstudent.

Only certain international student visas are eligible for financial aid. Please see the Office of Financial Aid website at www.cincinnatistate.edu/financialaid to determine eligibility.

Home-Schooled Students

Home-schooled applicants must submit:

- An online Application for Admission.
- A notarized letter from their parents detailing the content of the student's home-school experience and duration.
- A diploma and transcript from a recognized home-schooling association or a state diploma based on the GED. In addition, all home-schooled applicants must take the COMPASS®/ESL placement test.

COMPASS®/ESL Placement Testing

All students seeking a degree or certificate must participate in placement testing for mathematics, reading, writing, and keyboarding. Prerequisites are enforced; therefore, students are required to enroll in any developmental education class tested into before they can enroll in college-level courses. This placement testing assists advisors in placing students in the appropriate entry-level class. Testing is conducted in Room 196 Main Building on a walk-in basis; no appointment is necessary. Each applicant may only test once. There is no fee for testing, but a photo ID is required. COMPASS® test scores are valid for three years.

Testing hours are:

Monday through Thursday	8:00 a.m. to 8:00 p.m.
Arrive no later than 6 p.m.	
Friday	8:00 a.m. to 4:00 p.m.
Arrive no later than 2 p.m.	
First Saturday of Each Month	8:00 a.m. to 12:00 p.m.
Every Saturday in July and August, except July 2.	
Arrive no later than 9:15 a.m.	

A photo ID is required to test. No food or drink permitted in the lab.

The COMPASS® lab is closed on all federal holidays and November 25 and 26, 2010, December 24, 2010 through January 2, 2011, and July 2, 2011.

For everyone's safety, children are not permitted in the lab, and the College does not provide child care for this purpose.

Please allow 90 minutes for testing. Any questions regarding the COMPASS®/ESL placement test should be directed to Room 196, Main Building, (513) 861-7700. Sample test questions are available online at www.cincinnatistate.edu/admissiontesting.

COMPASS® Waiver Request

Students with transfer credit in college-level composition and algebra from a regionally accredited institution may not need to complete the entire placement test. Interested students should submit an official copy (mail only) of their college/university transcript(s) to the Office of Admission, along with submitting an online ACT COMPASS® Test Waiver Form available at www.cincinnatistate.edu

ACT in Lieu of COMPASS® Placement Testing

High school students that have taken the ACT within two years of their graduation date may be exempt from taking the COMPASS® Placement Test. Students who did not authorize ACT to electronically send scores to Cincinnati State at the time of testing should submit a documented copy of their ACT score to the COMPASS® Testing Center. The following minimum scores are required for exemption:
ACT English: 18
ACT Reading: 17
ACT Math: 23

For more information, contact the COMPASS® Testing Lab at (513) 569-1569.

COMPASS® Placement Test Accommodations

Prospective students who have a permanent disability as defined by the Americans with Disability Act and The Rehabilitation Act of 1973 may wish to seek an accommodation or waiver of part or all of the COMPASS® placement test. Students making such a request must submit proper documentation of their disability for review. Interested students should contact David Cover in the Office of Disability Services at (513) 569-1613 or e-mail david.cover@cincinnatistate.edu for more information concerning the necessary documentation, steps, and options.

Post-Secondary Enrollment Options Program (PSEO)

For grades nine, 10, 11, and 12, as outlined in Senate Bill 140 and House Bill 215 and amended by House Bill 282

Option A: Permits eligible student to enroll in college courses for college credit. Student electing this option are required to pay all costs incurred, including tuition, fees, books, and materials. Payment in full is required with the request to register for courses.

Option B: Permits eligible students to enroll in college courses for college and high school credit concurrently. Student electing this option are not required to pay for tuition, fees, books, and

required supplies. School districts may elect, through board policy, to recover from the student/parent all costs incurred by the district when and if a student fails to complete a college course, whether through a formal class-drop process or non-attendance other than for reasons generally accepted by the school district.

Guidelines, Policies, and Procedures

I. The purpose of the PSEO program is to provide high school students who are intellectually and socially capable of doing college work with an additional educational option. The option is appropriate for high school students whose local school district is not able to offer the course(s) needed to meet students' level of academic performance and for those students who have already completed all high school requirements and are ready to get a head start on college. The program is not intended to replace high school honors or advanced placement classes.

Important dates: By March 2010, the school district notifies students and parents about the PSEO program. Students must inform the public school district of their of intent to participate in the PSEO program. Non-public high school students who wish to participate in the PSEO program must contact their high school for details.

Only students who meet all of the following criteria are eligible for consideration for the PSEO program at Cincinnati State.

II. A. All students in grades nine, 10, 11, and 12 who wish to enter Cincinnati State for college and/or high school credit must complete this application and give it to their high school counselor.

For each academic year, all students must apply and have all credentials on file no later than: May 1, 2010 for Early & Late Fall terms. Public school students only may also apply, and have all credentials on file by November 16, 2010 for the Winter & Spring term. (PSEO does not qualify for the Summer term.)

Non-Public Schools: After being accepted by Cincinnati State students must submit an application to participate in PSEO for the coming school year by May 15-June 15 to the Ohio Department of Education (ODE). This application is in addition to the College application, and must be mailed to ODE, postmarked between May 15 and June 15. The letter of acceptance and funding award received from ODE must be submitted to Cincinnati State during the student's first term orientation. Please see a high school counselor for assistance.

High school counselors should mail the following information by the above deadline to: Office of Admission, Cincinnati State, 3520 Central Parkway, Cincinnati, Ohio 45223. No hand carried or faxed applications, letters of reference or transcripts will be accepted.

1. PSEO application completed in full with all signatures.
2. A letter of recommendation from the high school counselor attesting to the student's academic and social readiness to enter college courses.
3. An official copy of the high school transcript (all ninth grade proficiency tests must have been passed).

The above must be received and processed by the Office of Admission prior to taking the COMPASS® test.

B. After Cincinnati State receives the items above, qualified applicants are notified to complete the COMPASS® placement test administered on campus, Room 196, Main Building. Please allow approximately 90 minutes for testing within the scheduled hours. **Photo ID is required. No reservations are necessary.** There is no charge to take the test, but parking in the Central Parkway Garage is $5. For testing hours and practice tests, visit: www.cincinnatistate.edu/admissiontesting.

C. **Important: Each applicant may only test once.** Admission to the PSEO program is based upon the completed application for PSEO, and qualification for college-level courses as indicated by the COMPASS® test scores. **Students must demonstrate college-level mastery in all areas**.

D. Applicants who meet PSEO admission requirements are notified by mail and/or email. Students who do not meet PSEO requirements are encouraged to enroll in appropriate high school classes to better prepare for college. Students may reapply for the next year if qualified, and are eligible to apply as a matriculating student.

E. All students accepted in the PSEO program are required to attend the PSEO orientation with a parent/guardian. This meeting is held in August and includes a review of the College's academic procedures, practices, and policies.

F. High school counselors are responsible for explaining the equivalency, or lack of equivalency, of a given course at Cincinnati State in meeting high school graduation requirements.

G. Students must see the PSEO advisor prior to registration each term to prepare a schedule for the term. These registration meetings are held one week before classes begin.

H. PSEO students are permitted to register during open registration. Acceptance into the PSEO program does not guarantee availability of classes.

I. Once admitted, students are issued a College email account. Students must access this account for announcements and updates.

J. All books and materials given to students must be returned to the Office of Admission at the end of each term.

K. Students may take only as many credit hours as their high school Carnegie Units allow.

III. Students enrolling in the PSEO program are subject to the same policies and procedures, academic practices, and grading standards as all other Cincinnati State students.

A. To remain eligible for the PSEO program, students are required to successfully complete coursework and earn a minimum 2.0 GPA after 12 or more credit hours. A student cannot continue in the PSEO program if they earn a GPA lower than a 2.0.

B. Students are billed for courses they fail, receive an I, or drop after the 100% refund period.

IV. Home School

In order to qualify for PSEO consideration, home-school students must be registered with their school district prior to submission of application.

Cincinnati State reserves the right to review the final selection of college classes approved by the high school, and to limit participation in any class based on such circumstances as extraordinary lab fees, age, safety issues, excessive course load, or academic probation.

Financial Information

Student Expenses

The Ohio Board of Regents (OBR) provides a state share of instructional subsidy to Cincinnati State Technical and Community College for each Ohio resident enrolled. The amount received from the OBR is less than one-half of the College's operating costs. The balance must come from tuition payments and other sources. Out-of-state students pay a higher tuition since the College does not receive a subsidy for their instruction. (See the end of this section for complete explanation of residency determination.)

Schedule of Fees*

Tuition includes instructional fee, general fee, and other non-instructional service fees. Non-resident fees include a non-resident surcharge.

	Ohio Resident	Non-resident
Tuition per credit hour	$85.90	$171.80

Miscellaneous Fees

Admission Fee (payable at first registration)	$10.00
Advanced Standing Credit Fee	$85.90
Non-Resident Surcharge (per credit hour)	$85.90
Late Registration Fee	$100.00
Extended Payment Fee	$40.00
Course/Lab Fee	varies per course
Student ID Card replacement	$10.00
Registration Fee (per term)	$ 6.00
Technology/Activity Fee (per term)	$25.00
Facilities Fee (per credit hour)	$ 6.00
Facilities Fee maximum = $55.00 per term	
Returned Check Fee	$20.00

Parking Fees

Parking privileges (per term)	$50.00
Pay per use	
Ludlow Garage	$ 2.00
Lot C	$ 2.00
Central Parkway Garage	$ 5.00

All fees are subject to change at the discretion of the College. Fees other than Tuition and Course/Lab fees are non-refundable.

PLEASE NOTE: All fees for each term must be paid by the end of that term. Certificates, degrees, transcripts, and further registration activities are withheld until all financial obligations are fully paid.

Cooperative Education Employment

Please refer to a specific program curriculum to determine exact co-op credits required. Charges for co-op credit must be paid in advance on the established registration date.

Books and Supplies

The cost of books and supplies can vary from term to term. Also, different programs have different requirements. Students in the engineering technologies, for example, generally will spend more on supplies and equipment than the business-oriented programs.

Students with pending financial aid in excess of their tuition and fees may charge books against their pending financial aid using their SurgeCard at the Follett Bookstore located on the ground floor of the ATLC Building.

The first school term usually is the most expensive as students purchase books and supplies at that time that they also use in later terms. The average expense for books and supplies is $350 per term.

Senior Citizens

Tuition fee waivers are available for senior citizens who register to audit courses on a space-available basis during open registration periods. The waiver covers the in-state tuition fee; senior citizens must pay all other fees. Waivers are not applicable to non-audited courses nor non-credit courses A senior citizen is defined as a student who is 60 years of age or older at the time of registration.

Refund of Tuition Charges

Students are responsible for paying all charges incurred as a result of registering for classes. The College will not drop a student's classes nor reduce tuition charges/fees due to a student's non-payment of those charges.

Students may receive a fee reduction for classes by formally withdrawing from those classes for any reason. The amount of the fee reduction is based upon the date of withdrawal and calculated according to the College's published refund schedule. Refunds are disbursed to the student or/and a third-party payor. There also may be a reduction or loss of financial aid eligibility. Refund checks are mailed to students within 14 days of financial aid disbursal if there is financial aid in excess of a student's tuition charges/fees.

1. Requests for refunds are considered only if the student officially withdrawals from the course. Students may utilize the online registration function of MyServices to drop courses up to the calendar day before the term begins. The online option to drop a course is not available once the term begins. Students may also withdraw from a course at any time by completing and signing the official Registration Activity Form available in the Office of the Registrar.
2. The Admission fee, Registration fee and Late Registration fee are NOT refundable.
3. The following fees are not refundable unless the College cancels all classes for which the student registers:
   - Registration fee
   - Technology/Activity fee
   - Facilities fee
   - Extended Payment fee
   - Late Registration/Payment fees
4. The College's refund schedule is as follows:
   - Refunds for dropped classes processed in the Office of the Registrar before the first day of the term are calculated at a rate of 100% refund of the in-state or out-of-state tuition and course/lab fee for the dropped class. Students are not eligible for financial aid for these dropped classes.
   - Refunds for dropped classes processed in the Office of the Registrar from the first day of the term through the seventh calendar day of the term are calculated at a rate of 100% refund of the in-state or out-of-state tuition and course/lab fee only for the dropped class. Students are not eligible for financial aid for these dropped classes.
   - Refunds for dropped classes processed in the Office of the Registrar from the eighth to fourteenth calendar day of the term are calculated at a rate of 50% refund of the in-state or out-of-state tuition fee and course/lab fee for the dropped class.
   - There is no reduction of charges for courses dropped after the fourteenth calendar day of the term, however, there may be a reduction or loss of financial aid eligibility.
5. Flexibly scheduled courses: Courses which have a beginning or/and ending date different than the first and last weeks of the normal term schedule are considered flexibly scheduled and have a prorated refund period applied to them. A 100% refund is applicable to a flexibly scheduled course dropped in the first 11% period of that course's term. A 50% refund is applicable to a flexibly scheduled course dropped in the 12% to 22% period of that course's term. No refund is applicable after the 22% period of the term.
6. Course cancellation: A refund of 100% is made to a student who has registered for courses that have been cancelled by the College, if the student does not change to another course.
7. Refunds for students whose registration bill was paid by third-party funding (financial aid, agency) are applied toward reimbursing the third-party before any disbursement to the student.
8. If a student owes a financial obligation to the College, the refund is applied toward payment of the balance due before any disbursement to the student.
9. Students who do not follow the established dropped-class procedures of the College are not eligible for a refund.
10. Students who have questions concerning refunds should contact the Cashier's Office.
11. Appeals to this refund policy may be filed by completing and submitting an appeal form, available at the Cashier's Office.

Cincinnati State Technical and Community College reserves the right to revise this statement of tuition refunds at the time.

Non-Attendance of Classes

1. Instructors are required to document student attendance in each course meeting through the first two weeks of the term.
2. From the first day of the term until the First Day to Withdraw

for the term, students who drop or withdraw from a course must identify whether or not they attended the course section.
3. A student who enrolls in a course but does not attend the course within the first two weeks will be designated a No Show (NS) and dropped from the course by the instructor.
4. If there is a discrepancy between a student's self-reported attendance status and the attendance status reported by an instructor, the attendance status reported by the instructor will be the status of record.
5. Students are not permitted to begin attending a course section after an NS has been issued by the instructor or self-reported by the student for that course section.
6. The designation of NS will not appear on the student's transcript.
7. A student who receives an NS designation for a course is still financially responsible for payment for the course. State and federal financial aid is not applicable to a course for which a student has received an NS designation.

A student is not permitted to withdraw from a course he or she did not attend or to which an NS has been assigned.

Ohio Residence for Tuition Surcharge Purposes

Tuition is charged on the basis of residence in the State of Ohio and residence outside of the State of Ohio. A student with a question of their right to claim legal residence in the State of Ohio for educational purposes may request the College review their residency status. The student initiates the review process by submitting a completed Review of Residency form to the Office of the Registrar. The Review of Residency form should be submitted to the Office of the Registrar at least five working days prior to the beginning of the term in which the student plans to enroll.

Proof of residency is required when requesting a review of residency. An Ohio driver's license or Ohio state identification card is required. A lease, deed, or notarized letter to validate living in the state is required. Proof of paying Ohio income tax, bank statements, voter registration card, employment, and letters all can be considered support documents to validate residency status. Other documents may be requested as needed.

General Residency Guidelines

The following persons shall be classified residents of the State of Ohio for tuition surcharge purposes. (Documentation supporting the student's request for classification as an Ohio resident is required).

a. A dependent student, at least one of whose parents or legal guardian has been a resident of the State of Ohio for all other legal purposes for 12 consecutive months or more immediately preceding the enrollment of such student in an institution of higher education.
b. A person who has been a resident of Ohio for the purpose of this rule for at least 12 consecutive months immediately preceding his or her enrollment in an institution of higher education and who is not receiving, and had not directly or indirectly received in the preceding 12 consecutive months, financial support from other persons or entities who are not residents of Ohio for all other legal purposes.
c. A dependent child of a parent or legal guardian, or the spouse of a person who, as of the first day of the term of enrollment, has accepted full-time, self-sustaining employment and established domicile in the State of Ohio for reasons other than gaining the benefit of favorable tuition rates. Documentation is required. Residency status is lost immediately if the employed person upon whom resident student status was based accepts employment and establishes domicile outside of Ohio less than 12 months after accepting employment and establishing domicile in Ohio.
d. A person who is living and is gainfully employed on a full-time or part-time and self-sustaining basis in Ohio and who is pursuing a part-time program of instruction at an institution of higher education shall be considered a resident of Ohio for tuition surcharge purposes.
e. A person who enters and currently remains on active duty status in the United States military service while a resident of Ohio for all other legal purposes and his or her dependents shall be considered residents of Ohio as long as Ohio remains the state of such person's domicile.
f. A person on active duty status in the United States military service who is stationed and resides in Ohio and his or her dependents shall be considered residents of Ohio.

A dependent person classified as a resident of Ohio for these purposes as a result of (a) listed above and who is enrolled in an institution of higher education when his/her parents or legal guardian removes their residency from the State of Ohio shall continue to be considered a resident during continuous full-time enrollment and until his or her completion of any one academic program.

In considering residency, removal of the student or the student's parents or legal guardian from Ohio shall not, during a period of 12 months following such removal, constitute relinquishment of Ohio residency status otherwise established under items (a) or (b) listed above.

A person transferred by his or her employer beyond the territorial limits of the 50 states of the United States and the District of Columbia while a resident of Ohio for all other legal purposes, and his or her dependents, shall be considered residents for these purposes as long as Ohio remains the state of such person's domicile and as long as such person has fulfilled his or her tax liability to the State of Ohio for at least the tax year preceding enrollment.

A person who has been employed as a migrant worker in the State of Ohio and his or her dependents shall be considered a resident for these purposes provided such person has worked in Ohio for at least four months during each of the three years preceding the proposed enrollment.

Any person once classified as a non-resident, upon the completion of 12 consecutive months of residency, must apply to the institution he or she attends for reclassification as a resident of Ohio for these purposes if such a person in fact wants to be reclassified as a resident. Should such a person present clear and convincing proof that no part of his or her financial support is or in the preceding 12 months has been provided directly or indirectly by persons or entities who are not residents of Ohio for all other legal purposes, such a person shall be reclassified as a resident.

Any reclassification of a person who was once classified as a non-resident for these purposes shall have prospective application only from the date of such reclassification.

Evidentiary determinations under this rule shall be made by the institution which will require the submission of documentation regarding the sources of a student's actual financial support and other documentation. Criteria which may be considered in determining residency for tuition purposes may include, but are not limited to:

Criteria evidencing residency:
1. If a person is subject to tax liability under section 5747.02 of the Revised Code
2. If a person qualifies to vote in Ohio
3. If a person is eligible to receive state welfare benefits
4. If a person has an Ohio driver's license and/or motor vehicle registration
5. If a person has a signed and binding lease/deed to a domicile in the State of Ohio

Criteria evidencing lack of residency:
1. If a person is a resident of or intends to be a resident of another state or nation for the purpose of tax liability, voting, receipt of welfare benefits, or student loan benefits (if the student qualified for that loan program by being a resident of that state or nation)
2. If a person is a resident or intends to be a resident of another state or nation for any purpose other than tax liability, voting, or receipt of welfare benefits

IMPORTANT: An individual's immigration status will affect his or her ability to obtain resident status for tuition purposes. Contact the Office of the Registrar at (513) 569-1522 for more information.

Additional information and guidelines concerning residency are available in the Office of the Registrar.

Tuition Reciprocity for Indiana Residents

Cincinnati State Technical and Community College does not charge out-of-state tuition to residents of Adams, Allen, Blackford, Clark, Dearborn, Decatur, Delaware, Fayette, Franklin, Henry, Jay, Jefferson, Jennings, Ohio, Randolph, Ripley, Rush, Scott, Switzerland, Union, Wayne, and Wells counties in Indiana who are admitted to the College in either a degree or certificate program under the reciprocity agreement between Ohio and Indiana. The only programs excluded from the reciprocity agreement with Indiana are the Nursing programs including the two-year associate's degree in nursing, LPN to RN Transition, and Licensed Practical Nursing certificate. To be admitted a student must submit an admission application, have high school and college (if applicable) transcripts mailed to Cincinnati State, and complete the placement test.

This same reciprocity agreement enables residents of Butler, Darke, Mercer, Preble, Shelby, and Van Wert Counties in Ohio to attend Ball State University, Indiana University East, Ivy Tech Community College of Indiana-Region 6, Ivy Tech Community College of Indiana-Region 9 and Purdue University College of Technology at Muncie and Richmond in courses or programs not specifically excluded from this agreement by each institution and pay Indiana resident tuition rates.

Tuition Reciprocity for Northern Kentucky Residents

Cincinnati State Technical and Community College does not charge out-of-state tuition to residents of Boone, Bracken, Campbell, Carroll, Gallatin, Grant, Kenton, and Pendleton counties in Kentucky who are approved to enroll at Cincinnati State under the reciprocity agreement between Ohio and Kentucky. To qualify for reciprocity, students must be admitted to Cincinnati State as degree-seeking (matriculated) students and enroll in eligible associate's degree programs. To be admitted a student must submit an application for admission, have high school and college (if applicable) transcripts mailed to Cincinnati State, and complete the COMPASS® placement test. Certificate programs are excluded from this tuition reciprocity agreement.

This same reciprocity agreement enables graduates of Cincinnati State who are residents of Butler, Clermont, Hamilton, and Warren counties in Ohio to enroll in certain baccalaureate degree programs at Northern Kentucky University and pay Kentucky resident tuition rates. Graduates must satisfy all NKU regular transfer admission requirements, including any requirements of the specific baccalaureate program.

Office of Financial Aid and Scholarships

The Office of Financial Aid is open Monday through Thursday from 8 a.m. to 6:30 p.m. and Friday 8 a.m. to 5 p.m. No appointment is necessary. Students are accomodated on a first come, first served basis. Telephone assistance is available during office hours at (513) 569-1530.

The goal of the Office of Financial Aid at Cincinnati State is to enable access to higher education by providing college financial planning and quality customer service to students and families in pursuit of their educational goals. Cincinnati State awards over $30 million annually from federal and state financial aid programs, private donors, and the College's own funds to some 15,000 students. More information on financial aid can be found at www.cincinnatistate.edu under Financial Aid and Scholarships.

Financial aid is money in the form of scholarships, grants, loans, and employment (federal work-study). Most scholarships do not have to be repaid. Some scholarships, however, are awarded to students who promise to perform some service when they finish school. Grants are typically awarded on the basis of financial need and do not have to be repaid. Loans are borrowed money that must be repaid over a period of time, usually after the student leaves school. Federal work-study is money that students earn by working at a part-time job with an office on campus.

How To Apply

Each year, beginning January 1, students must complete the Free Application for Federal Student Aid (FAFSA). To complete the FAFSA application online go to www.fafsa.gov. The FAFSA includes all information necessary to determine the student's Expected Family Contribution (EFC). The FAFSA must be completed for consideration of most federal student aid programs. Many states offer financial assistance to students based on the FAFSA results and the availability of funds each year.

Students and parents of dependent students must apply for a PIN number at www.pin.ed.gov before they can complete the FAFSA. This PIN can be used each year to electronically apply for federal student aid and to access Federal Student Aid records online. Students must provide the federal school code number for each school where they want their FAFSA results sent. The federal school code number for Cincinnati State is **010345**.

To receive maximum consideration for certain programs, including the Supplemental Educational Opportunity Grant (SEOG), and Federal Work-Study (FWS), students should submit their FAFSA by February 15 of each calendar year. Once a FAFSA is submitted, students receive an email with a Student Aid Report (SAR); students should keep all parts of this report. The College receives the results of each student's FAFSA electronically in three to five business days.

Students receive notification via Cincinnati State email from the Office of Financial Aid if further documentation is needed, or when their award is available.

How Financial Aid Awards are Calculated

Awards are calculated using the following formula: cost of attendance minus expected family contribution equals need.

Generally, financial aid is awarded to students based on need. One of the principles behind awarding need-based financial aid is that students and their families should pay for educational expenses to the extent they are able. A family's ability to pay for educational costs must be evaluated in an equitable and consistent manner. To be fair to everyone, a standard federal formula is used to calculate a student's Expected Family Contribution (EFC). The information is derived from the student's completed Free Application for Federal Student Aid (FAFSA). Financial need is the difference between a student's total annual Cost of Attendance (COA) and the amount the student and his or her family is expected to contribute toward those expenses. A student's need for financial assistance will differ from school to school because the cost of attendance will differ.

Estimated Cost of Attendance (COA)

A student's COA is pro-rated based on the number of terms enrolled. Student's aid cannot exceed the assigned COA as follows:

In State	**Independent**	**Dependent**
Tuition	$5,976	$5,976
Room & Board	$8,400	$4,200
Books	$3,300	$3,300
Transportation	$900	$900
Personal	$3,000	$1,000
Facility Fee	$336	$336
Tech & Registration Fee	$168	$168
	$22,080	$16,880

Out of State	Independent	Dependent
Tuition	$11,952	$11,952
Room & Board	$8,400	$4,200
Books	$3,300	$3,300
Transportation	$1,800	$1,800
Personal	$3,100	$1,500
Facility Fee	$336	$336
Tech & Registration Fee	$168	$168
	$27,056	$23,256

Need based aid (ie: Pell Grant, SEOG, subsidized Stafford loans, work-study, and state grants) are assigned first to students based on their EFC, priority filing (if applicable), and federal limits. Then, non-need-based aid (ie: unsubsidized Stafford loans, PLUS loans) are assigned to students by subtracting the need based aid from the COA, and using the federal limits to award aid for the difference. If a student received any other funding source (ie: NEALP, scholarships, or outside assistance), the student's award must be re-adjusted to ensure the award does not exceed the COA. For the student's benefit, aid will be adjusted in the following order:

1. PLUS Loan
2. Unsubsidized Loan
3. Subsidized Loan
4. Federal Work-Study (any unearned amount)
5. SEOG

All financial aid is awarded according to federal, state, and institutional guidelines. Financial aid is disbursed to students after the processing of no-show rosters is complete. Please see the section on eligibility criteria for more information.

Students participating in a study abroad program should contact the Office of International Affairs at (513) 569-4696, or visit the office in Room 189, Main Building. Students wishing to use their financial aid while abroad should contact the Office of Financial Aid at (513) 569-1530 or visit the office in Room 155, Main Building.

Eligibility Criteria

To receive state/federal financial aid students must:

- Be enrolled or accepted for enrollment as a regular student working toward a degree or certificate in an eligible program
- Be a U.S. citizen or eligible non-citizen
- Have a valid Social Security number
- Sign a statement on the FAFSA certifying all federal student aid will be used only for educational purposes
- Not be in default on a federal student loan or owe an overpayment on a federal student grant
- Register with the Selective Service, if required
- Make Satisfactory Academic Progress (SAP). See SAP section in this catalog a more detailed description.
- Not have been convicted for any illegal drug offense while receiving federal financial aid funds

Other general financial aid information:

- Financial aid awards are adjusted appropriately for changes in a student's enrollment status between terms.
- To be eligible for federal student aid, a student must enroll and attend classes in which they are registered.
- To be eligible for loans, a student must be enrolled in at least six credit hours at the time of disbursement.
- Students are no longer eligible for financial aid once graduation requirements are met.

The Office of Financial Aid is required to recalculate a student's financial aid award(s) to reflect only those classes for which the student actually begins attendance.

Detailed information on these and other financial aid eligibility criteria may be obtained from www.cincinnatistate.edu under Financial Aid and Scholarships.

Types of Aid

Federal Student Aid Programs

The federal government provides various student financial aid programs to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.

Federal Pell Grant

Pell Grants are awarded to undergraduate students who have not earned a bachelor's or professional degree and demonstrate financial need. The annual maximum Pell Grant is determined each year by the federal government. Pell Grants may be awarded to both full and part-time students and are pro-rated based on attendance.

Academic Competitiveness Grant (ACG)

Academic Competitiveness Grants are awarded to full-time undergraduate students who have completed a rigorous secondary school (example: high school) program of study after January 2005. For second year, ACG students must have a 3.0 college GPA.

Supplemental Educational Opportunity Grant (SEOG)

SEOG is for undergraduate students with exceptional financial need who are eligible to receive a Pell Grant. Priority for SEOG at Cincinnati State is given to students who have a completed financial aid file by February 15 of each year. Funding is limited and is awarded based on the availability of funds. SEOG may be awarded to both full and part-time students and is pro-rated based on attendance.

Federal Work-Study

Federal Work-Study provides jobs for students with financial need, allowing them to defray educational expenses. The amount a student earns may not exceed the Work-Study award. When assigning work hours, supervisors consider a student's class schedule, Work-Study award amount, and employer needs. Work-Study awards are offered first to students with exceptional financial need. Priority is given to students who have a completed financial aid file by February 15 of each year. Funding is limited and is awarded based on the availability of funds. This program is intended to help train students for the labor market as well as meet their financial needs.

Federal Stafford Loan Program

Federal Stafford loans (subsidized and unsubsidized) are low-interest loans made to students attending school on at least a half-time basis. At Cincinnati State, half-time means enrolled for at least six credit hours per term. Students are not required to make payments on subsidized or unsubsidized loans while in at least half time (six or more credit hours). However, students are required to make payments on the interest that accrues, while in school at least half time, on an unsubsidized loan. An option to have the interest capitalized on an unsubsidized loan is available.

At Cincinnati State, **all** first-time borrowers are required to complete an online loan entrance counseling session in order to receive the first disbursement of their loan proceeds for the academic year. Students access the loan counseling session and Master Promissory Note (MPN) at www.cincinnatistate.edu/loancounseling when they receive an email notification of the award. The purpose of these mandatory loan counseling sessions is to ensure that all student borrowers:

- Review and understand their loan repayment obligation
- Review and understand their rights and responsibilities as a borrower
- Anticipate their average monthly repayment amount
- Remember to update their lender/guaranty agency with any address or other pertinent change
- Review the deferment, forbearance, and cancellation conditions of their loan
- Review the consequences of delinquency and default of a student loan
- Receive debt management information.

Federal PLUS Loans – Loans for Parents

Federal PLUS loans enable parents of dependent students with good credit histories to borrow funds to help pay their child's educational costs. The student for whom a PLUS loan is borrowed must attend school on at least a half-time basis. To apply, parents should complete a prescreening for eligibility at www.parentanswer.com. Cincinnati State will receive acknowledgement of the status of the loan when complete.

In the event a parent is unable to borrow a PLUS loan, students may qualify for additional unsubsidized loan funds.

Ohio State Grant Programs

The Ohio Board of Regents (OBR) administers several state financial aid programs providing assistance to college students based on a variety of criteria ranging from need to academic achievement. For more information on these programs, visit the OBR website at www.regents.state.oh.us.

Ohio Academic Scholarship - The Ohio Academic Scholarship program provides scholarships for up to four years for academically outstanding Ohio high school graduates on a competitive basis. The program's objective is to encourage Ohio students to attend an Ohio college or university. Ohio's academically top-ranked students are eligible and should contact their high school guidance counselor for more information or go to the OBR website at www.regents.ohio.gov for more information.

Ohio War Orphan's Scholarship - The Ohio War Orphan's Scholarship program provides reimbursement for undergraduate instructional fees waived by state-assisted institutions on behalf of eligible students. The children of disabled or deceased veterans who served in the military during a period when the United States was at war are eligible to apply. Visit the OBR website at www.regents.ohio.gov for more information and to apply.

Nurse Education Assistance Loan Program (NEALP) - The purpose of the NEALP is to provide financial assistance to students enrolled in approved nurse education programs in Ohio schools and to encourage students to remain in Ohio as they enter the nursing profession. NEALP loans are limited to $3,000 per year for a maximum of four years. The NEALP loan is cancelled on an annual basis though service as a fulltime Ohio LPN, RN, or nurse instructor. For 100% cancellation, applicants must secure full-time employment in the direct clinical practice of nursing or nurse instruction within a period, not to exceed six months, following graduation from the approved nurse education program. LPN and RN recipients must serve five years and nurse instructors must serve four years for 100% cancellation. Borrowers who do not complete the service obligation must repay the entire outstanding loan balance, plus interest. Visit the OBR website at www.regents.ohio.gov for more information and to apply.

Ohio Safety Officers - A tuition waiver is for available children of fire fighters and/or peace officers killed in the line of duty, and provides a waiver of undergraduate instructional fees at state-assisted colleges. Visit the OBR website at www.regents.ohio.gov for more information and to apply.

Tuition Reciprocity for Indiana Residents

Cincinnati State Technical and Community College does not charge out-of-state tuition to residents of Adams, Allen, Blackford, Clark, Dearborn, Decatur, Delaware, Fayette, Franklin, Henry, Jay, Jefferson, Jennings, Ohio, Randolph, Ripley, Rush, Scott, Switzerland, Union, Wayne, and Wells Counties in Indiana who are admitted to the College in either a degree or certificate program under the reciprocity agreement between Ohio and Indiana. The only programs excluded from the reciprocity agreement with Indiana are the Nursing programs including the two-year associate's degree in nursing, LPN to RN Transition, and Licensed Practical Nursing certificate. To be admitted a student must submit an admission application, have high school and college (if applicable) transcripts mailed to Cincinnati State, and complete the placement test.

This same reciprocity agreement enables residents of Butler, Darke, Mercer, Preble, Shelby, and Van Wert Counties in Ohio to attend Ball State University, Indiana University East, Ivy Tech Community College of Indiana-Region 6, Ivy Tech Community College of Indiana-Region 9 and Purdue University College of Technology at Muncie and Richmond in courses or programs not specifically excluded from this agreement by each institution and pay Indiana resident tuition rates.

Indiana State Grant Programs

Note: The State Student Assistance Commission of Indiana (SSACI) has entered into a reciprocity agreement with Cincinnati State. As a result of Indiana student's eligibility for the in-state tuition rate at Cincinnati State the Frank O'Bannon State Grant and Indiana Contact for Space is no longer available. SSACI's mission is to make college affordable through need-based grants and to allow choice by granting awards to those attending public, independent and proprietary colleges.

Cincinnati State Scholarship Program

The purpose of the scholarship program at Cincinnati State is to acknowledge and reward high academic achievement by helping deserving students finance their college educational costs. The Cincinnati State scholarship application deadline date is March 1 each calendar year - no exceptions. **Recipients of a scholarship from Cincinnati State must reapply each year.**

Eligibility requirements include:

- U.S. citizenship
- Enrollment or accepted for enrollment into a degree or eligible certificate program prior to application deadline
- Minimum grade point average of 3.0 (for most scholarships)
- For new students, have ranked in upper 20% of their high school graduating class
- For continuing students, have completed a minimum of 12 credit hours at Cincinnati State prior to application deadline
- For need-based applicants, have Free Application for Federal Student Aid (FAFSA) results on file
- Two letters of recommendation

Students who meet eligibility criteria and complete all requirements to apply for a scholarship by the due date are considered for all scholarships for which they are eligible. The number and type of scholarships vary from year to year depending on donations received for the scholarship program.

Private (Outside) Scholarship Opportunities

The public library is an excellent source of information on private sources of financial aid. Many companies have programs to help students pay for post-secondary educational cost for employees and their family members. In addition, financial assistance is available from many foundations, religious organizations, fraternities, sororities, town and city clubs, local school boards, and civic groups. This information is free. There are free online scholarship search programs accessible via the internet. Students are invited to one of the largest free online scholarship search programs called FASTWeb at www.fastweb.com. Students are also encouraged to review the Cincinnati State website at www.cincinnatistate.edu under Financial Aid and Scholarships or the Scholarship Bulletin Board located outside the Financial Aid Office for up-to-date scholarship opportunities.

Staff and Dependent Tuition Waivers

Faculty, adjuncts, staff, and dependents are eligible for tuition waivers at Cincinnati State. To participate, the correct waiver for full time staff and their dependents must be obtained each year (starting with the Summer Term) from the Office of Human Resources and completed with the proper signatures. Adjunct faculty and part-time staff must obtain the proper waiver and signatures each term. All completed forms must be returned to the Office of Financial Aid by the appropriate bill due date to avoid late fees.

Type	Covered	Not Covered
Full time Faculty/Staff	Tuition Registration Fee Technology Fee Facility Fee Application Fee	Lab Fees
Full time Faculty/Staff Dependents	Tuition Registration Fee Technology Fee Application Fee	Lab Fees Facility Fee
Adjunct Faculty *(Only for term in which the adjunct teaches)*	Tuition	Lab Fees Facility Fee Registration Fee Technology Fee Application Fee
Adjunct Faculty Dependents *(Only for term in which the adjunct teaches)*	Half Tuition	Lab Fees Facility Fee Registration Fee Technology Fee Application Fee
All PT Staff *(For two courses per term)*	Tuition	Lab Fees Facility Fee Registration Fee Technology Fee Application Fee

Enrollment of Less than Half Time and Loans

Students must be enrolled for at least half time (six credit hours) to be eligible for loans. Any time a Stafford loan-borrowing student withdraws to less then six credit hours, takes off a term, or enrolls less than half time, exit counseling is required. Even though a student may intend to return to Cincinnati State within at least six credit hours, the student is required by federal regulations to complete exit counseling, as their repayment deferment time period has begun. Students may complete exit counseling at www.cincinnatistate.edu/loancounseling.

The Official and Unofficial Withdrawal Policy for Financial Aid Recipients and The Return of Federal (Title IV) Funds

Department of Education regulations require students earn their eligibility for Title IV funds through attendance in classes. If a Title IV recipient ceases to be enrolled prior the end of the term, the student's eligibility for Title IV funding must be recalculated. The recalculation process may require that portions of the Title IV funding be returned to the funding source.

Official Withdrawals

Upon dropping all classes for any given term, a student is considered to have officially withdrawn from Cincinnati State, even if future enrollment is anticipated. To officially withdraw, a student **must** submit the Course Withdrawal Form to the Office of the Registrar. A student who completely withdraws after the fourteenth day of the term up through 60% period of the term is subject to a calculation and must return a pro-rated portion of their financial aid to Cincinnati State.

Unofficial Withdrawals

Students are considered an unofficial withdrawal if she/he receives a failing grade (F/U) in all classes for which they have registered and began class attendance. A student can appeal this unofficial withdrawal status to the Office of Financial Aid by the deadline indicated in their notice. The student must, in her/his appeal, provide documentation from the instructor, dean, or assistant dean of the applicable division. The following are acceptable forms of such documentation: exams, records of attendance, tutorials, computer-assisted instruction, counseling, academic advisement, or study groups. The withdrawal date for students considered unofficially withdrawn is the midpoint of the term for which Title IV funds were disbursed unless proved otherwise through the appeal process.

Standards of Academic Progress (SAP) Policy

It is the responsibility of the student to read, understand, and adhere to this policy. Failure to comply with this policy may result in cancellation of state and/or federal financial aid, and full or partial repayment of the financial aid.

Students who receive state and/or federal financial aid are required to make Satisfactory Academic Progress (SAP). SAP is measured by completing a required percentage of credit hours, completing one degree within a maximum time frame, attempting a maximum amount of DE/Pre-Tech credit hours, and maintaining a minimum grade point average. SAP is reviewed at least annually for financial aid recipients.

Probation/Termination

Termination: Students not meeting SAP will have their state and federal aid terminated. All aid for current and future terms will be terminated until the student is meeting all provisions of SAP, or has an approved appeal.

Probation: Students in danger of not meeting SAP are placed on probation. A student is allowed aid for the current term; however, all future aid is placed on hold pending a review of their status each term. When the student is meeting standards or no longer in danger of falling below standards, then their aid is taken off hold. When the student is in a termination category, as defined above, their aid is terminated. It is the responsibility of the student to contact their advisor to review their progress each term.

Appeals

Students have the right to appeal their financial aid status if they do not meet the requirements of this policy (except for the DE maximum standard).

In general, appeals are for documented extenuating circumstances only! Examples of extenuating circumstances include a medical emergency or a family emergency. All appeals must be legibly hand-written or typed, and submitted to the Office of Financial Aid Appeals Committee with supporting documents/reason for not meeting SAP, as required by the deadline indicated in their termination email. Students who appeal are encouraged to provide enough supporting documentation to substantiate the extenuating circumstance. Students without adequate documentation will not be approved in the appeal process. Students who wish to complete a second major at any time must complete the first degree and provide a degree audit with the appeal. Students seeking a second degree must first complete one degree and include a degree audit with their appeal.

Appeals are considered by the Appeal Committee. The committee determines whether the student is eligible to continue receiving state and federal financial aid, based on the documents provided, and under what conditions the student may receive aid. If the appeal is denied, the student must enroll without state or federal aid until such time as the requisite GPA and completion percentage are met (up to the 150% maximum time frame).

Once a term has ended, appeals that are approved are not retroactive to previous terms. This is why it is important to include all necessary information by the deadline. If more information is needed, but not received by the deadline, the appeal is considered for the next term. All appeal decisions are final. The Director of Financial Aid has the authority to exercise professional judgment on a case by-case-basis.

Definitions

Attempted Credit Hours
Attempted credit hours are those that are not dropped before the end of the 100% refund period. A status of A, N, D, I, or W count as attempted. A grade of A, B, C, D, S, U, or F also count as attempted.

Completed Credit Hours
A grade of A, B, C, S, or D count as a completed course.

Standards

Completion Percentage Standard - Students must complete 67% of the credit hours that are attempted. This percentage is calculated by dividing the number of credit hours attempted by the number of credit hours completed. Attempted credit hours are those that a student registers for without dropping during the 100% refund period.

Maximum Time Frame Standard - Students may attempt 150% of the credit hours required for one degree program at Cincinnati Sate. After 150% has been attempted, students have exhausted the maximum time frame to complete a degree and therefore will no longer be eligible to receive financial aid at this institution. For instance, if the published requirement of a degree program is 108 credit hours, a student may receive financial aid for up to 162 credit hours (108 x 150%) to complete a degree. Transfer credit hours that apply to your degree program count toward the maximum time frame. Students in a double major may receive 150% of their first degree program and up to 60 additional credit hours for their second degree program or up to 30 additional credit hours for a certificate program.

Maximum DE/Pre-Tech - Students may only take up to 45 credit hours of remedial courses (DE/pre-tech), after which financial aid is only granted for non-remedial courses. This cannot be appealed. (This may not terminate all aid, but only aid toward DE classes.)

Minimum GPA - Students must maintain a 2.0 cumulative grade point average. Remedial (DE/pre-tech) coursework does not count in calculation of cumulative GPA.

Special Conditions

English as a Second Language (ESL) Courses: Enrollment in ESL courses will not count against the 150% maximum time frame. These courses count towards the maximum credits allowed for DE courses.

Repeated Courses: The highest grade recorded in a repeated course is the grade of record at Cincinnati State and is used in computing the student's grade point average. Both courses count towards the student's institutional hours attempted, but only the hours associated with the last grade will be counted as completed hours.

Transfer Students: Credit hours that transfer in to Cincinnati State will count in the total number of completed credit hours. Transfer students are subject to all the same measures of SAP as a non-transfer student. Students whose transfer credit hours cause them to not meet the course maxium requirement may appeal including a degree audit count only those credit hours that count toward their program.

Audits: Audited courses do not count towards hours attempted or hours completed. Students may not receive aid for an audited course.

Advanced Standing: Advanced standing credit hours received count as attempted and completed credit hours toward the maximum time frame standard and completion percentage standard.

Fresh Start and Academic Forgiveness: Students who receive Fresh Start or Academic Forgiveness are not exempt from meeting SAP. All credit hours attempted and completed, as well as GPA, must be taken into consideration in determining SAP for financial aid purposes.

Re-Entry: Students who return to Cincinnati State following any length of separation are subject to meeting SAP for any and all terms of enrollment at Cincinnati State.

Prior Enrollment Without Financial Aid: Those students who previously did not use financial aid are not exempt from meeting SAP. All credit hours attempted and, completed, as well as GPA, must be taken into consideration in determining SAP regardless of previous financial aid status.

Change of Majors/Double Majors: Students who decide to change their major or double major while enrolled at Cincinnati State are subject to all provisions of SAP. Attempted and completed credit hours, as well as GPA for all majors, must be taken into consideration in determining SAP.

Academic Policies & Procedures

Equal Opportunity

Cincinnati State Technical and Community College is committed to a policy of equal educational opportunities for all persons regardless of race, age, handicap, sexual orientation, national origin, or gender. This policy is adopted as a matter of law and as a matter of educational policy consistent with the goals and purposes of the College.

The College also adheres to a policy of equal employment opportunity and affirmative action to end any illegal pattern of discrimination and to overcome the effects of past discrimination.

Assessment of Student Academic Achievement and Graduate Educational Outcomes

All Cincinnati State students participate in assessment activities throughout their academic life at the College. In addition, the College collects and analyzes information from graduates, employers, advisory committee members, and other external sources to assist faculty and staff in monitoring the effectiveness of academic programs.

Cincinnati State is a member of the Academic Quality Improvement Project (AQIP) of the Higher Learning Commission, North Central Association of College and Schools. Under the auspices of the AQIP, and in congruence with the College mission statement (see page 13), Cincinnati State has established the following criteria for assessing the general educational outcomes of Cincinnati State graduates. Currently, the College is establishing procedures for continuous measurement of graduates' attainment of these competencies.

A Cincinnati State graduate will be able to:

- Read critically, including the ability to analyze and interpret a variety of printed books, documents, and articles
- Produce clear, logical, correct, coherent, and properly documented prose
- Plan, write, and deliver an effective oral presentation
- Use mathematical skills to solve practical problems
- Analyze, interpret, and critically respond to nonprint media/sources
- Explain how social, organizational, and technological systems work
- Display awareness of cultural, ethnic, gender, racial, and religious diversity
- Demonstrate self-management skills such as being able to accurately self assess, set personal goals, and monitor personal progress
- Demonstrate professional and ethical workplace practices by successful completion of cooperative education, clinical or practicum experience, or internships
- Function in the workplace both independently and as a member of a team
- Display a commitment to lifelong learning

Cooperative Education Program Policies

The cooperative education program is an integral part of Cincinnati State's past growth, current strength, and continued success. The College's commitment to cooperative education is reflected in the curricula of most of the associate's degree programs.

Cooperative Education Requirements

Cincinnati State Technical and Community College values the cooperative education experience, but each division establishes its own policies regarding how students may fulfill co-op requirements. Students should refer to the academic division sections of this catalog for specific information on how the divisions expect students to meet cooperative education requirements.

Meeting Academic Eligibility Requirements

To be eligible for placement in cooperative education employment (or clinical experience/directed practice), students must maintain the required grade point average (GPA) as stated in the College catalog (see "Academic Probation and Dismissal" in this section of the catalog). Students must also demonstrate satisfactory proficiency in core or other required courses.

Students who do not maintain the required GPA are not eligible for cooperative education or clinical experience/directed practice without the permission of the program coordinator. Refer to the division sections of the catalog for additional requirements.

Obtaining Cooperative Education Assignments

The College has been quite successful in placing most students in cooperative education jobs; however, there is no absolute guarantee of initial or continuing employment. The employer is solely responsible for decisions about hiring, retention, dismissal, promotion, or demotion of a cooperative education student. Initial and continuing employment depends on the skills, aptitudes, and behaviors the individual student offers to each potential employer.

Co-op Registration Policy

- No student may report to his or her co-op job until he or she has registered and paid for co-op.
- A student failing to register for co-op is not be eligible to receive co-op credit for that term.
- Employers of co-op students who fail to register for co-op are notified by the coordinator that the student no longer has co-op status. The employer has the option to allow the student to continue to work full-time without co-op status or terminate employment. This decision is made by the employer.

Withdrawal From Co-op/Clinical Experience

If a student is removed from a cooperative education or clinical experience course due to unsatisfactory performance, and the student subsequently withdraws from that course, the faculty member responsible for the course, with the approval of the division dean, may remove the W and assign a grade of U or F.

Grading Policies

Grade Reports

Course grades are available to students at the end of each term through the MyServices section of the College website. It is the student's responsibility to check his or her grades for accuracy. Any errors, discrepancies, or omissions should be reported to the instructor and/or division dean responsible for the course. Student concerns about grades should be made known within 30 days of the end of the term for which the grade was issued. (See "Academic Appeals Procedures" elsewhere in this section.)

Grade Changes

Changes to course grades must be initiated by the instructor who issued the grade, and must be submitted to the appropriate division dean for approval no later than two terms after the term in which the grade was originally issued. The division dean forwards all approved grade changes directly to the Office of the Registrar for processing.

Grading Standards

The College does not have a universal policy or standard for determining grades for courses or assignments. Grading policies and procedures are the prerogative of each instructor. In some instances, academic departments or programs have established

grading standards that apply to a particular course or group of courses. It is the student's responsibility to be aware of the instructor's grading policies, and to seek this information from the instructor if necessary.

Grading System and Credits Earned

The following system is used to record student achievement or status in courses:

Grade	Explanation	Grade Point Value Per Credit Hour
A	Superior	4.000
B	Good	3.000
C	Average	2.000
D	Poor	1.000
F	Failure to complete course requirements	0.000
W	Official Withdrawal	Not Computed
AC	Advanced Placement Program Credit	Not Computed
CL	CLEP Credit	Not Computed
EC	Cincinnati State Proficiency Examination Credit	Not Computed
EL	External Certificate/Learning Exam	Not Computed
ET	External Formal Training Program	Not Computed
EX	Work Experience Credit	Not Computed
I	Incomplete	Not Computed
IB	International Baccalaureate Credit	Not Computed
IP	Incomplete S/U	Not Computed
K	Transfer Credit	Not Computed
N	No Grade Reported	Not Computed
S	Satisfactory	Not Computed
TP	Tech Prep Credit	Not Computed
U	Unsatisfactory	Not Computed
VO	Vocational Teacher Referral Credit	Not Computed
X	Audit	Not Computed

Calculation of Grade Point Average (GPA)

The College utilizes three grade point averages (GPA) for each student.

Cumulative GPA is calculated as the total quality points earned (grade point value per credit hour, listed above) divided by the total credit hours attempted for courses bearing quality points at the College.

Term GPA is calculated as the total quality points earned divided by the total credit hours attempted for courses bearing quality points for the term.

Program GPA is calculated as the total quality points earned divided by the total credit hours attempted for all courses bearing quality points listed in the student's current audit curriculum.

The audit curriculum is the list of requirements the student must complete in order to earn a degree or certificate. See "Program Graduation Requirements" later in this section for additional information.

Developmental Education courses and English as a Second Language courses, with course numbers in the format "DE 00XX" and "ESL 00XX," are not calculated in the GPA.

Incomplete (I or IP)

A grade of I (incomplete) or IP (incomplete for classes graded on a pass/fail basis) is awarded at the discretion of the instructor. When unusual circumstances prevent a student from completing course requirements during the term in which the student is enrolled, the instructor may agree to record a grade of I or IP until the final grade is established. Timetables and requirements for the completion of the course are the instructor's prerogative. If a final grade has not been submitted to the Office of the Registrar by the last instructional day of the following term, a grade of F or U will be automatically recorded.

Satisfactory/Unsatisfactory Grades (S/U)

The grade of S represents satisfactory performance, or passing, in those courses graded satisfactory/unsatisfactory. Only the grades of C or higher are considered passing in the satisfactory/unsatisfactory system.

No Grade Reported (N)

An N grade is administratively assigned by the Office of the Registrar if no grades are reported by the instructor for an individual student or for an entire section of a course. A grade of N is not issued to individual students by the instructor.

Official Course Withdrawal (W)

Students who withdraw from a regularly-scheduled course after the Last Day to Drop a Course for the term through the thirty-fifth instructional day of the term receive a grade of W for the course. Students who withdraw from a flexibly-scheduled course after the day designated as the Last Day to Drop a Course for that course section through the day designated as the Last Day to Withdraw from that course section receive a grade of W for the course. Students must complete a Registration Activity Request form in the Office of the Registrar. The date of withdrawal is the date the form is received in the Office of the Registrar. A W grade is not computed in the student's GPA.

Audit (X)

Students interested in taking a course without receiving a grade or credit may register to audit the course. No college credit may be earned or later claimed for an audited course. Regular tuition is charged for courses being audited. Requirements for attendance, completion of assignments, and examinations are the prerogatives of the instructor of the course.

A student may not request a transfer from credit to audit or vice versa after the Last Day to Drop a Course for the term.

Advanced Standing Credit

(AC, CL, EC, EL, ET, EX, IB, TP, VO)

Advanced standing credit means that a student receives credit for completing a Cincinnati State course or cooperative education requirement by using one of the methods listed below to demonstrate successful completion of appropriate prior academic and/or work experience. Advanced standing credit is available to students who have been accepted into a degree or certificate program.

Students seeking advanced standing credit must follow the College and divisional procedures described in the Cincinnati State Student Guide to Advanced Standing Credit. This publication is available in the Office of the Registrar and in each academic division's main office. The information is also available on the College website.

The types of advanced standing credit are:

External Proficiency Examination:

The amount of credit given for an external proficiency examination is determined by the appropriate academic department.

- Credit may be awarded for Advanced Placement (AP) scores of three or higher. Credit is shown on the student's record as AC.
- Credit is awarded for College Level Examination Program (CLEP) scores based on the American Council on Education (ACE) recommendations of minimum scores for awarding credit. The ACE recommended score and semester hours may be viewed on the web at www.collegeboard.com/student/testing/clep/scr_cgs.html. Credit is awarded for a score of 50 or more with the exception of Level 2 Language in French (minimum score of 59), German (minimum score of 60), and Spanish (minimum score of 63). Credit is shown on the student's record as CL. Students should have their CLEP test scores sent to the Cincinnati State Office of Admission for processing.
- Credit may be awarded for International Baccalaureate program scores of five or higher. Credit is shown on the student's record as IB.

Internal Cincinnati State Proficiency Exam.
Credit is shown on the student's record as EC.
Credit for Applicable Work Experience.
Credit is shown on the student's record as EX.
Credit for an External Certificate/Licensing Exam.
Credit is shown on the student's record as EL.
Credit for an External Formal Training Program.
Credit is shown on the student's record as ET.
Credit through Senior Vocational Teacher Referral.
Credit is shown on the student's record as VO.
Credit for Tech Prep Coursework.
Credit is shown on the student's record as TP.

Some types of advanced standing credit are not available in some degree or certificate programs.

Students should be aware that advanced standing credit awarded by Cincinnati State may not be applicable to degrees at other colleges or universities. A student who intends to transfer to another college or university should consult with a transfer advisor at that institution concerning the transferability of Cincinnati State advanced standing credits.

Students should make arrangements to apply for advanced standing credit as soon as possible after admission to a program.

Requesting Advanced Placement Credit

Cincinnati State awards advanced standing credit to students who have completed Advanced Placement (AP) courses in high school and have achieved test scores at or above the level of three.

The State of Ohio, working through the University System of Ohio, has initiated policies to facilitate the ease of transition from high school to college as well as between and among Ohio's public colleges and universities. For more information, see page 37.

Beginning in Early Fall term 2009:

1. Students obtaining an Advanced Placement (AP) exam score of three or above are awarded the aligned course(s) and credits for the AP exam area(s) successfully completed.
2. General Education courses and credits received are applied towards graduation and satisfy a general education requirement if the course(s) to which the AP area is equivalent fulfill a requirement.
3. If an equivalent course is not available for the AP exam area completed, elective or area credit is awarded in the appropriate academic discipline and is applied towards graduation where such elective credit options exist within the academic major.
4. Additional courses or credits may be available when a score of four or five is obtained. Award of credit for higher score values varies depending on the institution and academic discipline.
5. In academic disciplines containing highly dependent sequences (Sciences, Technology, Engineering and Mathematics – STEM) students are strongly advised to confer with the college/university advising staff to ensure they have the appropriate foundation to be successful in advanced coursework within the sequence.

For AP subjects not listed, credit is awarded for scores of three or higher. Contact the Office of the Registrar – Transfer Area for a complete list of credit awarded for all AP exam scores.

Students should have their AP test scores sent to Cincinnati State's Office of Admission.

Advanced Placement Subject Score	Cincinnati State Course Equivalent	Credits Awarded
Art History 3	ART 1662	3
Art History 4 or 5	ART 1662, 1663, 1664	9
Biology 3	BIO 4081	5
Biology 4 or 5	BIO 4081, 4082, & 4083	15
Calculus AB 3, 4, or 5	MAT 1154	5
Calculus BC 3, 4, or 5	MAT 1154, 1155, & MAT T200 - Math General Elective	15
Chemistry 3	CHE 2251	5
Chemistry 4 or 5	CHE 2251, 2252, & 2253	15
Chinese Language and Culture 3	LAN T100 – Language General Elective	12
Chinese Language and Culture 4	LAN T100, T200 – Language General Elective	20
Chinese Language and Culture 5	LAN T100, T200 – Language General Elective	24
Computer Science A 3, 4, or 5	IT T100 – IT General Elective	3
Computer Science AB 3, 4, or 5	IT T200 – IT General Elective	3
English Language 3	ENG 1001	3
English Language 4 or 5	ENG 1001, 1002, & 1003	9
English Literature 3	ENG 1001	3
English Literature 4 or 5	ENG 1001, 1002 & 1003	9
Environmental Science 3, 4, or 5	EVS 7624	4
European History 3, 4 or 5	HST T100 – HST General Elective	3
French Language 3	FRN 1060, 1061, & 1062	12
French Language 4	FRN 1060, 1061, 1062, 1063, & 1064	20
French Language 5	FRN 1060, 1061, 1062, 1063, 1064, & 1065	24
French Literature 3	FRN 1060, 1061, 1062, & 1063	16
French Literature 4	FRN 1060, 1061, 1062, 1063, & 1064	20
French Literature 5	FRN 1060, 1061, 1062, 1063, 1064, & 1065	24
Comp Government & Politics 3, 4, or 5	POL 1533	3
Human Geography 3, 4 or 5	GEO 1552	3
Italian Language and Culture 3	LAN T100 – Language General Elective	12
Italian Language and Culture 4	LAN T100, T200 – Language General Elective	20
Italian Language and Culture 5	LAN T100, T200 – Language General Elective	24
Japanese Language and Culture 3	LAN T100 – Language General Elective	12
Japanese Language and Culture 4	LAN T100, T200 – Language General Elective	20
Japanese Language and Culture 5	LAN T100, T200 – Language General Elective	24
Latin Literature 3	LAN T100 – Language General Elective	12
Latin Literature 4	LAN T100, T200 – Language General Elective	20
Latin Literature 5	LAN T100, T200 – Language General Elective	24
Latin: Vergil 3	LAN T100, T200 – Language General Elective	12
Latin: Vergil 4	LAN T100, T200 – Language General Elective	20
Latin: Vergil 5	LAN T100, T200 – Language General Elective	24
Macroeconomics 3, 4 or 5	ECO 1513	3
Microeconomics 3, 4, or 5	ECO 1512	3
Music Theory 3, 4, or 5	MUS T100 – Music General Elective	3
Physics B 3, 4, or 5	PHY 2291, 2292, & 2293	12

Physics C: Electricity and Magnetism 3, 4, or 5	PHY 2297	5
Physics C: Mechanics 3, 4, or 5	PHY 2295	5
Psychology 3, 4, or 5	PSY 1505 & 1506	6
Spanish Language 3	SPN 1080, 1081, & 1082	12
Spanish Language 4	SPN 1080, 1081, 1082, 1083, & 1084	20
Spanish Language 5	SPN 1080, 1081, 1082, 1083, 1084, & 1085	24
Spanish Literature 3	SPN 1080, 1081, 1082, & 1083	16
Spanish Literature 4	SPN 1080, 1081, 1082, 1083, & 1084	20
Spanish Literature 5	SPN 1080, 1081, 1082, 1083, 1084, & 1085	24
Statistics 3	MAT 1111	3
Statistics 4	MAT 1111 & 1112	6
Statistics 5	MAT 1111, 1112, & 1113	9
Studio Art: 2-D Design 3	ART 1692	3
Studio Art: 2-D Design 4 or 5	ART 1692 and ART 1693	6
Studio Art: 3-D Design 3	ART T100 – Art General Elective	3
Studio Art: 3-D Design 4	ART T100 – Art General Elective	6
Studio Art: 3-D Design 5	ART T100 – Art General Elective	9
Studio Art: Drawing 3	ART 1690	3
Studio Art: Drawing 4 or 5	ART 1690 and ART 1691	6
U.S. Government & Politics 3, 4, or 5	POL 1531 & 1532	6
U.S. History 3, 4 or 5	HST 1568, 1569, & 1570	9
World History 3, 4, or 5	HST 1561, 1562, & 1563	9

Requesting International Baccalaureate Credit

Cincinnati State awards credit to International Baccalaureate (IB) diploma graduates for higher level subjects passed at a satisfactory level. Minimum scores vary, by subject area, from five to seven as indicated in the following list.

For IB subjects not listed, credit may be awarded based on the recommendation of the appropriate Cincinnati State academic department or division.

Students should have their IB test scores sent by the International Baccalaureate Organization to Cincinnati State's Office of Admission.

International Baccalaureate Subject	Score	Cincinnati State Course Equivalent	Credits Awarded
Biology	5, 6, or 7	BIO 4081, 4082, & 4083	15
Chemistry	5	CHE 2251	5
	6 or 7	CHE 2251 & 2252	10
Economics	5, 6, or 7	ECO 1512, 1513, & 1514	9
English A1	5	ENG 1001	3
	6	ENG 1001 & 1002	6
	7	ENG 1001, 1002, & 1003	9
English A2	5, 6, or 7	ENG 1001, 1002, & 1003	9
World History	5	HST 1561	3
	6	HST 1561 & 1562	6
	7	HST 1561, 1562, & 1563	9
History of the Americas	5	HST 1568	3
	6	HST 1568 & 1569	6
	7	HST 1568, 1569, & 1570	9
African History	5, 6, or 7	HST 1575	3
European History	5, 6, or 7	HST electives	9
French *Ab initio*	5 or 6	FRN 1060 & 1061	8
	7	FRN 1060, 1061, & 1062	12
German *Ab initio*	5 or 6	GRM 1070 & 1071	8
	7	GRM 1070, 1071, & 1072	12
Spanish *Ab initio*	5 or 6	SPN 1080 & 1081	8
	7	SPN 1080, 1081, & 1082	12
French B	5 or 6	FRN 1063 & 1064	8
	7	FRN 1063, 1064, & 1065	12
Spanish B	5 or 6	SPN 1083 & 1084	8
	7	SPN 1083, 1084, & 1085	12
Philosophy	5, 6, or 7	PHI 1621	3
Psychology	5, 6, or 7	PSY 1505 & 1506	6
Physics	6 or 7	Consult Department Chair	
Mathematics	6 or 7	MAT 1152 & 1154	10

Requesting Other Advanced Standing Credit

To obtain advanced standing credit for all other types of prior learning, students should:

1. Obtain a Petition for Advanced Standing Credit from the Office of the Registrar.
2. Meet with his/her program chair or academic advisor to determine eligibility for advanced standing credit, and to determine which faculty member should receive the completed petition and supporting documentation.
3. Pay the advanced standing credit fee at the College Cashier's Office, where the petition is marked "paid." This step applies to students seeking advanced standing credit either through internal proficiency exams or through documented valid academic or work experience. There is a separate fee charged for each attempt to earn credit through an internal proficiency exam.
4. Submit the completed petition and supporting documentation to the appropriate faculty member, as determined in Step 2.

After the petition and related materials are reviewed by appropriate division personnel, and the request for advanced standing credit is approved or disapproved, the petition is forwarded to the Office of the Registrar and the student is notified of the results.

Students cannot earn credit through an exam for a course already completed at Cincinnati State. A course is defined as "completed" if a grade of A, B, C, D, F, S, U, or W has been issued.

Additional information is contained in the Cincinnati State Student Guide to Advanced Standing Credit, available in the Office of the Registrar.

Waiver of English Composition Requirement Based on Earned Degree

A student who has earned an associate's or bachelor's degree at a regionally accredited college or university will receive transfer credit for nine credits of English composition, which will satisfy the Cincinnati State English Composition requirement for all degree and certificate programs. The credit will appear on the student's transcript as "ENG REQC – Eng Comp Complete."

To receive this credit, an official academic transcript from the degree-granting institution must be submitted to Cincinnati State, using procedures described in the Admission section of this Catalog.

Dean's List and Academic Merit

Students who earn in one term 12 or more credit hours for academic courses for which quality points are awarded will qualify for dean's list status if their GPA for the current term is 3.5 or greater and no grades of I, F, or U have been earned in the current term. Developmental Education courses are not included in GPA calculations for the dean's list.

Students who earn in one term between six and 11 credit hours of academic courses for which quality points are awarded will qualify for academic merit status if their GPA for the current term is 3.5 or greater and no grades of I, F, or U have been earned in the current term. Developmental Education courses are not included in GPA calculations for academic merit.

Students who receive a grade of N will not initially be eligible for dean's list or academic merit. To be eligible for dean's list or academic merit, the grade change for the N grade must be submitted to the Office of the Registrar by the end of the tenth instructional day of the following term. Grade changes for N grades submitted after the tenth instructional day of the following term will not be recalculated for dean's list or academic merit status. Recalculation for dean's list and academic merit status will be done only for N grades issued for the immediately preceding term and only if the grade changes are submitted by the deadline.

Academic Probation, Suspension, and Dismissal

Cincinnati State students enrolled in a degree or certificate program must demonstrate satisfactory performance in order to remain in good standing at the College. Students who do not demonstrate satisfactory performance will be placed on academic probation. If the work of a student on probation does not improve, they may be subject to academic suspension and then academic dismissal from the College.

A student cannot graduate from a degree or certificate program while on academic probation or academic suspension.

Academic Probation

A student who has attempted at least 18 credits and has a Cumulative GPA below 2.0 is immediately placed on academic probation.

A student on academic probation must have his or her advisor's permission before registering for any classes. The number of credits for which the student may register will be determined based on consultation with the advisor.

A student who is placed on academic probation will be reevaluated at the end of each enrolled term.

Academic Suspension

If a student who is on academic probation earns a Term GPA below 2.0 in the next two enrolled terms, the student will be placed on academic suspension.

A student on academic suspension may not register for any courses at Cincinnati State for two terms, and may not represent the College or participate in College-sponsored activities, except activities intended to help the student improve his or her academic performance.

A student may appeal academic suspension through a written request to the academic vice president. The written request must include a rationale for the appeal and supporting documentation. The decision of the academic vice president is final.

Readmission after Suspension

A student who is readmitted to the College after suspension is subject to the following conditions:

- The student must meet with his or her program chair/advisor to determine a plan for academic success
- The student must have his or her advisor's permission before registering for any classes
- The student must maintain a Term GPA of 2.0 or greater for every enrolled term. The student will continue to be considered on probation as long as the student's cumulative GPA is less than 2.0.

Academic Dismissal

Cincinnati State expects students to be able to demonstrate continued academic success. A student who has been readmitted after suspension and is still on probation (because of a cumulative GPA below 2.0) is expected to raise their cumulative GPA to 2.0 or above within three terms. Failure to attain a cumulative GPA of 2.0 or above within three terms will result in academic dismissal.

A student who has been academically dismissed may not register for any courses for a period of one year.

A student may appeal academic dismissal through a written request to the academic vice president. The written request must include the rationale for the appeal and supporting documentation. The decision of the academic vice president is final.

Registration

Students may register for classes in person in the Office of the Registrar or by using the MyServices section of the Cincinnati State website. Registration for a term begins approximately four weeks prior to the first day of the term.

Priority Registration

The registration period each term consists of three overlapping segments or registration "windows":

Priority 1 registration is the time period set aside for active degree-seeking and certificate-seeking students with 30 or more credit hours (including transfer credits). Students in the Honors Experience can also register at this time, regardless of their accumulated credit hours. The Priority 1 registration window generally begins on a Friday after 5:00 p.m. and extends through the calendar day before the first day of classes for the term.

Priority 2 registration begins approximately four to five days after Priority 1 registration begins. This period is for active degree-seeking and certificate-seeking students regardless of their accumulated credit hours. The period extends through the day before the first day of classes for the term.

Priority 3 or open registration begins approximately one week after Priority 1 registration begins. Students who are not seeking a degree or certificate may register at this time. Applicants who have not been admitted to a program may also register. Registration for all students ends on the day before the first day of classes for the term.

For specific dates of registration and information regarding web registration, refer to www.cincinnatistate.edu/importantdates

On-Time Registration

Registration beginning with the Priority 1 WEB registration period through the last day of classes in the previous term will be considered On-Time Registration.

Late Registration

Late registration will begin on the day after classes end in the previous term and continue until the end of the first week of the term. Students who register for their first class after the last class day of the previous term will automatically be charged a $100 non-refundable late registration fee. Instructor's signatures will be required to add a class during the first week of the term if the course is on-line, has met, or is full. Once classes for the term have begun, all registration activity must be done in person; web registration is not available. Registrations are not permitted after the first week of classes of the term. Students who request to add classes after the first week of the term will be provided with academic advising appointments, financial aid, and career counseling as needed. They will be directed to register for classes for the following term.

Prerequisite Requirements

Before a student is permitted to register for any course, they must have successfully completed prerequisite requirements, or be currently enrolled in the course that is the prerequisite. A prerequisite to a course is either an appropriate score on the placement test or successful completion of a designated developmental education (DE) or another academic course prior to enrollment in the course.

Enrollment Status

Enrollment status is determined by the official number of credit hours for which a student registers each term. Enrollment status often is used to help determine eligibility for financial aid, veteran's benefits, company and agency funding, health benefits, and auto insurance.

Students are responsible for knowing their enrollment status and understanding the impact of changing their credit hours by using the add/drop process.

Cincinnati State defines a student's enrollment as follows:

Full-Time Enrollment	12 or more credit hours or full-time cooperative education placement
3/4-Time Enrollment	9 - 10 - 11 credit hours
Half-Time Enrollment	6 - 7 - 8 credit hours
Less than Half-Time Enrollment	5 or fewer credit hours

Students placed on a part-time cooperative education placement are not considered half-time students for the purpose of enrollment verification.

Enrollment Verification

Students may submit enrollment verification request(s) to the Office of the Registrar. Depending on the information requested, enrollment verifications may take up to five business days to process. An enrollment verification request form is available on the College website.

Name Changes

To request a name change, students must complete a Personal Data Change form available in the Office of the Registrar. All name change requests must be accompanied by a copy of official supporting documentation. Official documentation includes but is not limited to a marriage license, divorce decree, or court order for official name change. Only a student's legal name is used on all records maintained or issued by the College.

Administrative Withdrawal from Admitted Status

An admitted student who has not enrolled in classes for five consecutive terms is administratively removed from admitted status. To regain admitted status, students must reapply for admission and pay a $10 non-refundable fee.

Students who apply for readmission five or more years after their prior admission date must submit a new Application for Admission, pay a $10 non-refundable fee, and complete all other required admissions steps, including placement testing. These students also are subject to a new catalog year.

For additional information, see the "Admission, Fees, & Financial Aid" section of this catalog.

Completing More Than One Degree (Double Major)

When students are admitted to the College, they are considered to be seeking only one academic degree or certificate. In some cases, students may seek to "double major" by pursuing a second associate's degree in an area closely related to their initial degree program.

To be considered for a double major, students must first be fully admitted to an associate's degree program. Students in pre-admit status are not eligible to apply for a double major. Students seeking a certificate rather than a degree are not eligible to apply for double major status.

To be considered for a double major, students must apply for admission to the second program by completing a double major form available online under Admission in the MyServices area of MyCState. The academic division in which the student seeks the second major determines whether the student is eligible to pursue the second major.

Students granted double major status are expected to consult regularly with their program advisor (or advisors) to ensure they make appropriate progress in their degree programs.

Students with questions or concerns about their academic status or goals should consult with their program advisor, or with the Office of Admission.

Changing Degree Programs

Students who wish to transfer from one degree or certificate program to another must complete the online Change of Major form found under Admission in the MyServices area of MyCState.
When a student transfers from one degree or certificate program to another, all courses attempted that apply to the new audit curriculum – with the exception of cooperative education courses – automatically transfer to the new program. Course substitutions do not apply automatically to the new program; they must be entered for each program and catalog year. The new program's audit curriculum serves as the basis for calculating the program GPA.

Additional transfer of courses to the new program, including cooperative education courses, are evaluated by the divisional faculty and dean on an individual basis.

Repeated Course

If a course is repeated, only the highest grade is computed in the calculation of the GPA. If a student earns the same grade upon repeating a course, only one grade is computed in the calculation of the GPA. The original course grade is still shown on the transcript with an indication that it is not calculated in the GPA.

Limits to Repeated Course

A student who has received a grade of F, W, or any other grade twice for the same course cannot register for the course a third time without written permission of the student's program chair/advisor. The program chair/advisor may require the student to meet with a Cincinnati State counselor to discuss potential for success in the student's current degree or certificate program. (Note: A few Cincinnati State courses, such as physical education courses, do permit students to register more than twice without special permission.)

Academic Reassessment Policies

Cincinnati State offers two options for students who wish to recalculate their GPA. Students experiencing current academic success may adjust their GPA by applying to remove from their GPA calculation courses in which they earned grades of D, F, V, or WF that do not apply to the student's current degree or certificate program.

Students may discuss one of the following procedures with their program chair or academic advisor:

Fresh Start - for students returning to Cincinnati State after an absence of three years or more.

Academic Forgiveness - for students who have attended Cincinnati State continuously, or who are returning after an absence of less than three years.

Both Fresh Start and Academic Forgiveness are one-time, non-reversible options. Students may use only one of these options. Courses that are part of a degree or certificate that the student

has earned previously at Cincinnati State are not eligible for reassessment.

Students who plan to transfer to another college or university should note that the new college or university may use all grades earned in computing GPAs for admission or other purposes.

Fresh Start

For Fresh Start eligibility, students must:

- Complete all readmission procedures and requirements
- Be admitted to a degree or certificate program and have completed all Developmental Education requirements
- Have 12 or more credits—not including coursework for which Satisfactory/Unsatisfactory grades are assigned—to complete in their program at the time of application

To request Fresh Start, students must:

- Complete a petition for Fresh Start (available in division offices) in consultation with the program chair or academic advisor. This petition lists courses in which the student earned grades of D, F, V, or WF and requests that they no longer be calculated in the GPA.
- Submit the completed petition to the Office of the Registrar within five terms of admission to a degree or certificate program at Cincinnati State.

Academic Forgiveness

For Academic Forgiveness eligibility, students must:

- Be admitted to a degree or certificate program and have completed all Developmental Education requirements.
- Have 12 or more credits—not including coursework for which Satisfactory/Unsatisfactory grades are assigned—to complete in their program at the time of application.

To request Academic Forgiveness, students must:

- Complete a petition for Academic Forgiveness (available in division offices) in consultation with the program chair or academic advisor. This petition lists courses in which the student earned grades of D, F, V, or WF and requests that they no longer be calculated in the grade point average.

To initiate the request for Fresh Start or Academic Forgiveness, students must:

- Submit the completed petition to the Office of the Registrar by the twelfth calendar day of the term. Late petitions are held until the following term.
- Complete a minimum of 12 additional credits and maintain a GPA of 2.0 or higher, and earn no grade lower than a C. Developmental Education courses and co-op courses are not eligible.

At the end of the term:

- The Office of the Registrar evaluates the petitions. If the student has successfully completed 12 credits with a term grade point average of 2.0 or higher and earned no grade below a C, Fresh Start or Academic Forgiveness is applied.
- If the student has not completed 12 credits, the Office of the Registrar holds the petition and reviews it at the end of each term until the student completes 12 credits. If the student has maintained a term grade point average of 2.0 or higher and has earned no grade below a C, Fresh Start or Academic Forgiveness is applied.
- After the petition is approved, the following statement appears on the student's transcript: "The Fresh Start or Academic Forgiveness policy has been applied to academic work at Cincinnati State prior to (term/year of petition approval)." A new cumulative and program grade point average are calculated using the new set of applicable courses.

Academic Procedures

Academic Appeals Procedure

Cincinnati State Technical and Community College has adopted the following procedures to ensure students with legitimate concerns about academic processes (hereafter called "academic appeals") can resolve these concerns equitably. A student is expected to first attempt to resolve concerns directly with the instructor, within two terms of when the grade was issued.

1. A student is expected to bring his or her academic appeal first to his or her faculty advisor (program chair or cooperative education coordinator).
2. If the concern cannot be settled at this level, the student is expected to bring his or her academic appeal to the division dean or the dean's designee.
3. It is expected that most academic appeals will be resolved at the division level. However, if the concern cannot be resolved by the division dean, the student may continue the academic appeals process by meeting with an academic appeals panel. To initiate this process, the student must submit a written request to appeal the decision of the division dean, including a statement of the concern that is to be addressed, and pertinent documentation, to the academic vice president (AVP). The AVP reviews all pertinent information in order to determine whether the appeal merits the formation of a panel. If the AVP determines that an appeals panel should appropriately be formed, the process continues to step four. If the AVP does not feel the student's appeal merits the formation of a panel, he/she meets with the student involved and relays his/her findings and recommendations.
4. If an academic appeals panel is convened, it is composed of one dean (excluding the dean of the division involved in the appeal), appointed by the AVP; and two faculty members, appointed by the Faculty Senate. The designated dean chairs the panel, solicits appointment of the faculty representatives, convenes meetings of the panel, and provides copies of necessary documentation to the other panel members. Documentation includes:
   a. The student's written statement and other material the student wishes to submit
   b. A written summary of the disposition of the case at the division level, prepared by the division's dean
   c. The student's transcript, or any other related materials the panel may wish to examine
5. The chair will convene a meeting that includes the student, the members of the panel, and other participants the panel may choose to invite to the meeting. The student has an opportunity to present his or her concern, and the panel members have the opportunity to ask questions and seek clarification. If the panel determines there are issues involved which are not academic concerns, the panel informs the student of appropriate measures to be taken.
6. The panel may, at its own discretion, refer the matter to the Academic Policies & Curriculum Committee (APCC) for advice and recommendations.
7. If the APCC is convened to review the appeal, the panel chair must ensure that all related documentation is submitted to the APCC chair one week prior to the APCC meeting. Any recommendations made by the APCC are submitted to the academic appeals panel for consideration.
8. The chair of the academic appeals panel forwards a recommendation along with all related documentation to the AVP. The AVP makes the final determination regarding the appeal and notifies the dean of the division involved in the appeal. That dean communicates this determination to the student who initiated the appeal.

Attendance

Each student is expected to attend all classes and cooperative education/clinical placements as scheduled. Each College faculty member is expected to document student attendance during the first two weeks of the term and to report attendance to the Office of the Registrar. Attendance in cooperative education and clinical placements is reported by the cooperative education/clinical coordinator based on reports from the student's site coordinator.

Individual faculty members may establish course policies that consider attendance as a factor in determining course grades. Each student should check with his or her instructors to determine how attendance will be taken and in what ways, if any, attendance is a factor in grading.

Making Up Missed Work

The privilege of making up missed assignments, quizzes, tests, exams, and other course activities is not automatic. An instructor does not have to permit or grant make-up privileges. It is the student's responsibility to be aware of the instructor's make-up policies, and to seek this information from the instructor if necessary.

Expectations for Time Required Outside of Class

The amount of time required to complete homework for Cincinnati State courses will vary, depending on the course topic and level, as well as the student's prior preparation. Homework for college courses may include reading; writing essays, reports, or other papers; studying for quizzes and exams; preparing project materials; meeting with others to complete course activities; and a wide range of other tasks.

As a general guideline, students should plan to spend at least two to three hours outside of class each week for each course contact hour (that is, either a lecture hour or a lab hour). For example, a student enrolled in a course that has two lecture hours per week and three lab hours per week should plan to spend 10 to 15 hours per week outside of class completing work for that course.

It is the student's responsibility to plan a schedule that allows adequate time to complete the work required for each class. Students should seek additional information from their instructors regarding expectations for the time needed to complete all coursework.

Absence for Religious Observance

Students are permitted to be absent from class to observe a religious holiday. It is the student's responsibility to notify instructors of this planned absence no later than the end of the first week of the academic term. It is also the student's responsibility to make up any required work through a process and on a schedule to be determined by the course instructor.

Students who are absent from a clinical assignment because of a religious holiday must make up the missed time.

Absence for Participation in School Sponsored Activities

If a student must miss class because he or she is participating in a Cincinnati State sponsored co-curricular event (such as an athletic contest or a meeting of a professional organization), the absence should be treated as excused and should not have a negative impact on the student's attendance grade for the course.

Students are responsible for providing their instructors with appropriate documentation prior to the event. Students must also make up any required work through a process and on a schedule to be determined by the course instructor.

It is understood that this waiver applies only to the attendance grade, and not necessarily to other components of the instructor's grading system.

Non-Attendance

The following policies pertain to all courses.

- Instructors are required to document and report student attendance in each course meeting through the first two weeks of the term.
- From the First Day of the Term until the First Day to Withdraw for the term, students who drop or withdraw from a course must identify whether or not they attended the course section.
- A student who enrolls in a course but does not attend the course within the first two weeks is to be designated a No Show (NS) by the instructor.
- If there is a discrepancy between a student's self-reported attendance and the attendance status reported by an instructor, the attendance status reported by the instructor is the status of record.
- Students are not permitted to begin attending a course section after an NS has been issued by the instructor or self-reported by the student for that course section.
- The designation of NS will not appear on the student's transcript.
- A student who receives an NS designation for a course is still financially responsible for payment for the course. Federal financial aid is not applicable to a course for which a student has received an NS designation.
- A student is not permitted to withdraw from a course he or she did not attend or to which an NS has been assigned.

Adding, Dropping, or Withdrawing from a Course

The College term calendar, available on the College website, lists the dates when students may add, drop, or withdraw from a course after completing their initial registration. Student transactions to add, drop, or withdraw from a course are not official unless processed using the MyServices section of the Cincinnati State website or the appropriate form has been processed by the Office of the Registrar. All schedule changes must be made in person after classes have begun. No schedule changes are permitted in MyServices online after the class has met. The appropriate forms for registration activity can be obtained in the Office of the Registrar or on the website at www.cincinnatistate.edu/registrar-forms. The following regulations apply to all regular session courses offered during the term:

Adding a regular session course

- Prior to the first course meeting of the term, no approval is required to enter an open course, unless the course has an "instructor consent" requirement.
- Once a course has met, the approval of the course instructor must be obtained.
- The fifth class day of the term is the last day to enter a course.

Dropping a course - in person only

- Courses dropped from the time of registration through the fourteenth calendar day of the term do not need additional approval to be processed.
- The fourteenth calendar day of the term is the last day to drop a course. In an instance when the fourteenth day falls on a weekend or holiday, the last day to drop a course is the preceding business day.

Withdrawing from a course - available online via MyServices

- The withdrawal period for regularly scheduled courses begins each term the day after the Last Day to Drop a Course and ends on the thirty-fifth instructional day. The withdrawal period for flexibly scheduled courses begins after the day designated as the Last Day to Drop a Course for that course section through the day designated as the Last Day to Withdraw from that course section. No additional approval is required to withdraw from a course during this period.
- Only in circumstances beyond the student's control will a withdrawal be permitted after the thirty-fifth instructional day. All official late withdrawals must be approved by the course instructor and the division dean. In cases not approved, the student receives the grade assigned by the instructor.

Course Drop/Withdrawal Grading Policy

- Through the fourteenth calendar day of each term, courses officially dropped in the Office of the Registrar do not appear on students' transcripts.
- During the Withdrawal Period, official withdrawals are assigned a grade of W. The W appears on the student's transcript; however, it is not calculated into the grade point average (GPA).
- The instructor may not issue a W as the final grade. A W is assigned only if the student completes the withdrawal process in the Office of the Registrar.

Flexibly Scheduled Courses

The following policies and procedures pertain to flexibly scheduled course sections only:

- Course sections with a beginning and/or ending date different than the first and last days of the normal term schedule are considered flexibly scheduled. Flexibly scheduled course sections are identified in the course schedule with alphabetical section designations.
- Students may register for a flexibly scheduled course section with no additional approvals up to the first course meeting.
- A student may enter a flexibly scheduled course section by the date established as the Last Day to Enter a Course for that course section. Registrations beyond the date established as the Last Day to Enter a Course for that flexibly scheduled course section are not be permitted.
- A student may drop a flexibly scheduled course section without a grade appearing on their record by the date established as the Last Day to Drop a Course for that course section.
- A student may withdraw from a flexibly scheduled course section from the date established as the Last Day to Drop a Course for that section through the date established as the Last Day to Withdraw from a Course for that section.

Procedures for Students Called to Active Duty

Students enlisted in the military reserves or National Guard who are called to active duty may drop or withdraw from all courses. This may be accomplished in person, by fax, by mail, or through a designee.

Students called to active duty must complete the following:

- Provide the Office of the Registrar with a copy of the military orders. The student or designee may deliver the copy of the orders to the Office of the Registrar, mail it to Office of the Registrar, 3520 Central Parkway, Cincinnati OH, 45223, or fax it to (513) 569-1883.
- Request to be dropped from all courses. If this is accomplished in-person, the student completes the Registration Activity Request form. For fax, mail, or designee requests, staff in the Office of the Registrar may complete the appropriate form on the student's behalf.
- Indicate to the Office of the Registrar whether he/she attended any class sessions.
- If the student attended class sessions, he/she must provide the last date of attendance for each course to be dropped. If a designee who is handling this process cannot provide this information, the Office of the Registrar obtains the last date of attendance from the instructor.
- In some instances, time constraints may prevent the student from completing a Late Withdrawal request. In this case, the student may present the military orders within 30 business days of his/her return to receive Late Withdrawal. The Office of the Registrar does not accept Requests for Late Withdrawal after that time period.

Course Cancellation

A course offering may be canceled prior to the beginning of a term because of low enrollment. The College attempts to notify students of the course cancellation before the first day of the term, but cannot guarantee that such notice will be provided.

Weather-Related Canceling of Classes

In the event of adverse conditions, it may be necessary to cancel some class sessions. The College will rarely close completely.

Local radio and television stations may begin announcing Cincinnati State's operating status as early as 6:15 a.m. on the day involved. The status of the evening classes will be handled by a separate announcement later on the day involved.

Faculty Office Hours

All full-time College faculty maintain office hours to conduct in-person meetings with students. Some faculty members also maintain online office hours for communication with students by e-mail. Students should check with each instructor, or the receptionist in the instructor's division office area, to schedule appointments.

Children on Campus

Cincinnati State Technical and Community College strives to maintain an environment conducive to teaching and learning. Therefore, whenever children are brought to the campus they must remain with their parents, guardians, or caretakers in all areas of the College. Whether or not a child can be brought into a classroom is at the discretion of each instructor.

If the College's campus police department finds any child left unattended, they will locate the parent/caretaker so that the child can be cared for properly. Above all else, the College wishes to insure the safety and well-being of each child.

MyServices

MyServices is the pathway to web-based student services at Cincinnati State. Through MyServices, students can register, add and drop classes, view and print their class schedules, make payments, check on financial aid status, view and print their grade reports, view and print degree audits, and access a variety of other services. To access MyServices, go to the Cincinnati State website at www.cincinnatistate.edu, and then choose MyCState. Log in with username and password, then choose the MyServices tab.

Requesting College Transcripts from Cincinnati State

To obtain a copy of a Cincinnati State transcript, students may request in person, by web (using MyServices), by mail, or by fax. All requests must include name, student ID or Social Security number, dates attended, and the address to which the transcript should be sent. Students wishing to pick up the processed request should indicate so when the request is submitted. Requests must include the student's signature authorizing the College to release this information.

To request the transcript in person, the Office of the Registrar is open Monday (8 a.m. to 6:30 p.m.) through Friday, (8 a.m. to 5 p.m.) The Welcome Center is open Monday through Thursday until 6:30 p.m.

To request the transcript by mail, please mail the request to:
Office of the Registrar
Cincinnati State Technical and Community College
3520 Central Parkway
Cincinnati, OH 45223-2690
Requests may be faxed to (513) 569-1883.

Please note:

- Students who attended Cincinnati State after 1986 may request an official or unofficial transcript be printed for them while they are in the Office of the Registrar.
- Students who need their official transcript sent directly from the Office of the Registrar may request a transcript be sent to an individual or other institution designated by the student. Please allow five working days for staff to process such requests.
- Students who attended Cincinnati State prior to 1986 may request an official or unofficial transcript. If the student needs an official transcript sent directly from the Office of the Registrar he or she may request a transcript be sent to an individual or other institution designated by the student. Because all or part of records prior to 1986 may be on microfilm, allow ten working days for staff to process such requests.
- There is no charge for any transcript request (official or unofficial). For questions regarding ordering transcripts, please call the Office of the Registrar, (513) 569-1522. All financial obligations to the College must be cleared before any transcript are released.

SurgeCards

Every enrolled student is required to have a College identification card (SurgeCard) with them at all times for security purposes. The initial SurgeCard is free and is available from Student Activities, in Room 204 ATLC, **24 hours** after a student has registered for classes.

The SurgeCard is required to use some campus services such as the library, parking, fitness center and to attend College sports activities. Additional uses for the SurgeCard include bookstore, computer lab printing, food services, vending machines, day care door access for qualified parents, and other services. A SurgeCard is required to access available financial aid fund information that can be used to purchase books in the campus bookstore. Financial aid funds are never deposited on the SurgeCard. More information is available from Student Activities, Room 204 ATLC.

State of Ohio Policy for Institutional Transfer

Note: The following information is a policy of the Ohio Board of Regents.

Institutional Transfer

The Ohio Board of Regents, in 1990, following a directive of the 119th Ohio General Assembly, developed the Ohio Articulation and Transfer Policy to facilitate students' ability to transfer credits from one Ohio public college or university to another in order to avoid duplication of course requirements. A subsequent policy review and recommendations produced by the Articulation and Transfer Advisory Council in 2004, together with mandates from the 125th Ohio General Assembly in the form of Amended Substitute House Bill 95, have prompted improvements of the original policy. While all state-assisted colleges and universities are required to follow the Ohio Articulation and Transfer Policy, independent colleges and universities in Ohio may or may not participate in the transfer policy. Therefore, students interested in transferring to independent institutions are encouraged to check with the college or university of their choice regarding transfer agreements. In support of improved articulation and transfer processes, the Ohio Board of Regents will establish a transfer clearinghouse to receive, annotate, and convey transcripts among state-assisted colleges and universities. This system is designed to provide standardized information and help colleges and universities reduce undesirable variability in the transfer credit evaluation process.

Transfer Module

The Ohio Board of Regents' Transfer and Articulation Policy established the Transfer Module, which is a subset or entire set of a college or university's general education curriculum in AA, AS, and baccalaureate degree programs. Students in applied associate's degree programs may complete some individual transfer module courses within their degree program or continue beyond the degree program to complete the entire transfer module. The Transfer Module contains 54-60 quarter hours or 36-40 semester hours of course credit in English composition (minimum five to six quarter hours or three semester hours); mathematics, statistics, and formal/symbolic logic (minimum of three quarter hours or three semester hours); arts/humanities (minimum nine quarter hours or six semester hours); social and behavioral sciences (minimum of nine quarter hours or six semester hours). Oral communication and interdisciplinary areas may be included as additional options. Additional elective hours from among these areas make up the total hours for a completed Transfer Module. Courses for the Transfer Module should be 100- and 200-level general education courses commonly completed in the first two years of a student's course of study. Each state-assisted university, technical, and community college is required to establish and maintain an approved Transfer Module.

Transfer Module course(s) or the full module completed at one college or university will automatically meet the requirements of individual Transfer Module course(s) or the full Transfer Module at another college or university once the student is admitted. Students may be required, however, to meet additional general education requirements at the institution to which they transfer. For example, a student who completes the Transfer Module at Institution S (sending institution) and then transfers to Institution R (receiving institution) is said to have completed the Transfer Module portion of Institution R's general education program. Institution R, however, may have general education courses that go beyond its Transfer Module. State policy initially required that all courses in the Transfer Module be completed to receive its benefit in transfer. However, subsequent policy revisions have extended this benefit to the completion of individual Transfer Module courses on a course-by-course basis.

Transfer Assurance Guides

Transfer Assurance Guides (TAGs) comprise Transfer Module courses and additional courses required for an academic major. A TAG is an advising tool to assist Ohio university and community and technical college students planning specific majors to make course selections that will ensure comparable, compatible, and equivalent learning experiences across the state's higher-education system. A number of area-specific TAG pathways in the arts, humanities, business, communication, education, health, mathematics, science, engineering, engineering technologies, and the social sciences have been developed by faculty teams.

TAGs empower students to make informed course selection decisions and plans for their future transfer. Advisors at the institution to which a student wishes to transfer should also be consulted during the transfer process. Students may elect to complete the full TAG or any subset of courses from the TAG. Because of specific major requirements, early identification of a student's intended major is encouraged.

Completion of the Transfer Module is posted during the second week of the term following completion, and will appear on the student's Cincinnati State academic transcript.

Conditions for Transfer Admission

- Ohio residents with associate's degrees from state-assisted institutions and a completed, approved Transfer Module shall be admitted to any state institution of higher education in Ohio, provided their cumulative grade point average (GPA) is at least 2.0 for all previous college-level courses. Further, these students shall have admission priority over out-of-state associate's degree graduates and transfer students.
- When students have earned associate's degrees but have not completed a Transfer Module, they will be eligible for preferential consideration for admission as transfer students if they have GPAs of at least a 2.0 for all previous college-level courses.
- In order to encourage completion of the baccalaureate degree, students who are not enrolled in an AA or AS degree program but have earned 60 semester or 90 quarter hours or more of credit toward a baccalaureate degree with a grade point average of at least a 2.0 for all previous college-level courses will be eligible for preferential consideration for admission as transfer students.
- Students who have not earned an AA or AS degree or who have not earned 60 semester hours or 90 quarter hours of credit with a grade point average of at least a 2.0 for all previous college-level courses are eligible for admission as transfer students on a competitive basis.
- Incoming transfer students admitted to a college or university shall compete for admission to selective programs, majors, and units on an equal basis with students native to the receiving institution.

Admission to a given institution, however, does not guarantee that a transfer student will be automatically admitted to all majors, minors, or fields of concentration at the institution. Once admitted, transfer students shall be subject to the same regulations governing applicability of catalog requirements as native students. Furthermore, transfer students shall be accorded the

same class standing and other privileges as native students on the basis of the number of credits earned. All residency requirements must be completed at the receiving institution.

Acceptance of Transfer Credit

To recognize courses appropriately and provide equity in the treatment of incoming transfer students and students native to the receiving institution, transfer credit will be accepted for all successfully completed college-level courses completed in and after fall 2005 from Ohio state-assisted institutions of higher education. Students who successfully completed AA or AS degrees prior to fall 2005 with a 2.0 or better overall grade point average would also receive credit for all college-level courses they have passed. (See Ohio Articulation and Transfer Policy, Definition of Passing Grade and Appendix D) While this reflects the baseline policy requirement, individual institutions may set equitable institutional policies that are more accepting.

Pass/fail courses, credit by examination courses, experiential learning courses, and other nontraditional credit courses that meet these conditions will also be accepted and posted to the student record.

Responsibilities of Students

In order to facilitate transfer with maximum applicability of transfer credit, prospective transfer students should plan a course of study that will meet the requirements of a degree program at the receiving institution. Students should use the Transfer Module, Transfer Assurance Guides, and Course Applicability System for guidance in planning the transfer process. Specifically, students should identify early in their collegiate studies an institution and major to which they desire to transfer. Furthermore, students should determine if there are language requirements or any special course requirements that can be met during the freshman or sophomore year. This will enable students to plan and pursue a course of study that will articulate with the receiving institution's major. Students are encouraged to seek further information regarding transfer from both their advisor and the college or university to which they plan to transfer.

Appeals Process

Following the evaluation of a student transcript from another institution, the receiving institution shall provide the student with a statement of transfer credit applicability. At the same time, the institution must inform the student of the institution's appeals process. The process should be multi-level and responses should be issued within 30 days of the receipt of the appeal.

If a transfer student's appeal is denied by the institution after all appeal levels within the institution have been exhausted, the institution shall advise the student in writing of the availability and process of appeal to the state-level Articulation and Transfer Appeals Review Committee. The Appeals Review Committee shall review and recommend to institutions the resolution of individual cases of appeal from transfer students who have exhausted all local appeal mechanisms concerning applicability of transfer credits at receiving institutions.

Cincinnati State's Policy for Transfer of Credit

The Cincinnati State Policy for Transfer of Credit is in compliance with the Ohio Board of Regents' Transfer and Articulation Policy. Once a student is admitted to a degree or certificate program, official transcripts from previously attended colleges and universities submitted for admission are forwarded to the Office of the Registrar for transfer of credit evaluation. In general, only coursework earned at a regionally-accredited institution of higher education with a grade of C or better will be accepted as transfer credit. Courses completed in and after Fall 2005 at a regionally-accredited institution in which a passing grade of D was earned are also transferable.

Students who successfully completed an associate's degree or higher at a regionally-accredited institution prior to Fall 2005 with a 2.0 or better overall grade point average also receive credit for all college-level courses they passed. Pass/fail courses, credit by examination courses, experiential learning courses, and other nontraditional credit courses that meet these conditions will also be accepted and posted to the student record. Once the evaluation of transfer work is complete, the student receives, by mail, a Transfer Evaluation Report, which lists all credits awarded in transfer and what equivalent courses have been assigned at Cincinnati State. In the event no equivalent course at Cincinnati State can be assigned, the transfer course is accepted as elective credit. Whether or not courses accepted as elective credit are applicable to the student's degree or certificate program is at the discretion of the program chair or academic advisor. At the same time the student will be informed of the institution's appeals process.

In situations where coursework is five years old or older, or where requisite skills may have been lost, courses previously taken at other institutions are subject to review by the faculty and dean of the division that offers the equivalent course(s). Those courses reviewed that do not meet current program requirements and standards will not count toward degree or certificate requirements.

Transfer credit accepted at Cincinnati State appears on a student's transcript as a cumulative number of hours accepted.

Cincinnati State Transfer Module Appeal Process

Should a student transferring into Cincinnati State be dissatisfied with the credit awarded as part of the transfer module program of the State of Ohio, an internal appeal process and an external appeal process are both available.

The internal appeal process must be utilized first. At Cincinnati State, the internal appeal process for a student dissatisfied with credit awarded as part of the transfer module program is the College Academic Appeals Procedure, described previously in this section of the catalog.

The external appeal process may be utilized only after the internal appeal process has been completed and the student remains dissatisfied with the institution's judgement. The external appeal will be conducted by the Statewide Appeals Review Committee. More information on this process is available from the Ohio Board of Regents in Columbus, Ohio.

Graduation Requirements

To qualify for an associate's degree, a student must be admitted to a degree or certificate program, complete the program requirements as identified in the audit curriculum, attain at least a 2.0 cumulative and program GPA, and petition to graduate.

Completion is defined as earning the grade A, B, C, D, or S for any course. An earned D may not count toward graduation, depending on program and/or division policies.

As part of the graduation requirements for the Associate of Applied Business (AAB), Associate of Applied Science (AAS), Associate of Individualized Study (AIS), and Associate of Technical Study (ATS) degrees, a student must complete at least 21 credit hours in general education areas, distributed as follows:

- Communication Skills – 12 credits
  9 credits written communication (department code ENG)
  3 credits oral communication (department code COMM)
  Selected from these courses: COMM 1020, COMM 1021, COMM 1023, COMM 1024, COMM 1025, COMM 1027
- Social Sciences and Humanities – 9 credits selected from these areas:
  Social/Behavioral Sciences, including:
  - economics (department code ECO)
  - geography (department code GEO)
  - history (department code HST)
  - labor relations (department code LBR)
  - political science (department code POL)
  - psychology (department code PSY)

sociology	(department code SOC)
Arts/Humanities, including:	
art	(department code ART)
culture studies	(department code CULT)
foreign languages	(department codes FRN, SPN)
literature	(department code LIT)
music	(department code MUS)
philosophy	(department code PHI)
theatre	(department code THE)

Students seeking an AAB, AAS, AIS, or ATS degree should consult the curriculum for their program, published elsewhere in this catalog, to determine how the general education requirements should be met. Individual degree programs may require students to complete program-specified general education courses, or may permit students to choose some general education elective courses. Transfer credit for social sciences or humanities courses completed at another institution, in disciplines not listed above, may be applied toward Cincinnati State graduation requirements, with the program chair and division dean's permission.

Students seeking the Associate of Arts or Associate of Science degree must meet the general education requirements described on pages 72-75.

Program Graduation Requirements (Degree Audit Curriculum)

Requirements for each degree and certificate program at Cincinnati State are published each year in this catalog. A student is expected to fulfill the requirements in effect for the catalog year in which they are admitted to the program. This set of requirements may be referred to as the student's Academic Evaluation or Degree Audit curriculum. Students can review a copy of their Degree Audit curriculum using the MyServices section of the Cincinnati State website.

A student readmitted to the College after an absence of a year or more is expected to fulfill the requirements in effect at the time of readmission. Any course substitutions or waivers granted prior to readmission will not carry forward and apply toward the new requirements. Students who requested course substitutions or waivers previously must request them again and ask that they be applied toward the new catalog year.

Students should consult their program chair or academic advisor to discuss any changes made to program requirements that could affect progress toward completing the degree or certificate program.

College Orientation Requirement

All Cincinnati State students who are enrolled in a degree program are required to complete a college orientation course, either FYE 9001 College Survival Skills, FYE 9002, College Success Strategies, or FYE 9003, The Community College Experience.

Students in the Cincinnati State Honors Experience fulfill the orientation course requirement by completing HNR 1695, Introduction to Honors.

Some certificate programs also require students to complete FYE 9001, FYE 9002, or FYE 9003. Each certificate program that requires completion of an orientation course is indicated in the Academic Divisions section of this Catalog. From Early Fall 2001 through Summer 2006, the required orientation course was titled CAR 9002, College Success Seminar. Students who enrolled in a degree or certificate program that required CAR 9002 and did not complete it are required to complete either FYE 9001, FYE 9002, or FYE 9003.

Students must complete the orientation course requirement within the first 18 credit hours taken at Cincinnati State.

A degree-seeking or certificate-seeking student who has already successfully completed 18 or more credits of college-level courses at another college or university and has received Cincinnati State transfer credit for these courses is not required to complete an orientation course.

The orientation courses FYE 9001, FYE 9002, and FYE 9003 introduce students to the college experience and to Cincinnati State's expectations and resources for new students. The orientation course earns college credit, but it does not fulfill general studies or core course requirements for degree or certificate programs. Students should consult an advisor to determine which of these courses will best meet their needs.

Residency Requirement for Degree Programs

Students seeking a degree at Cincinnati State Technical and Community College, except those seeking the Associate of Technical Studies or Associate of Individualized Study degrees, must complete at least 45 credit hours of college-level, non-co-op/non-clinical credit hours at Cincinnati State. Credit hours earned in courses which combine class and lab hours will be considered non-clinical credit hours for the purpose of the residency requirement.

Students seeking an Associate of Applied Business or Associate of Applied Science degree must earn a minimum of 50% of college-level, non-co-op-/non-clinical technical coursework (as identified in the Associate Degree Program Summary/Academic Evaluation) required for their program at Cincinnati State. The resident credit hours required for the degree program are applicable to the College residency requirement.

Advanced standing credit is not applicable to the College residency requirement. Credit earned at Cincinnati State through the Greater Cincinnati Consortium of Colleges and Universities is applicable to the College residency requirement.

In Associate of Technical Study and Associate of Individualized Study programs, the residency requirement shall be no less than 30 credits at Cincinnati State.

Students who transfer to Cincinnati State from another accredited Ohio college or university with a completed Transfer Module are subject to the guidelines in the "State of Ohio Policy for Institutional Transfer" statement found elsewhere in this section of the catalog.

Residency Requirement for Certificate Programs

To qualify for a certificate, students must be admitted to a certificate program, fulfill the certificate program requirements, complete a minimum of 50% of their certificate program requirements at Cincinnati State, attain at least a 2.0 cumulative and program GPA, and petition to graduate.

Graduation Petition

A student must file a petition in order to graduate. Any matriculated student may submit a graduation petition when he or she has earned 70 credit hours (including transfer credit) toward an associate's degree, or 40 credit hours (including transfer credit) toward a one-year certificate. Petitions for certificates in programs shorter than one year should be submitted according to the schedule below and corresponding with the term when the student expects to complete the certificate (no specified number of credit hours required to petition). The petition must be filed in the Office of the Registrar 20 weeks prior to the date of completed coursework.

Term: Early Fall 2010 (9/7/10-11/8/10)

Petitions accepted:	June 7 to July 7, 2010*
Petitions not accepted after:	July 7, 2010**
Graduation date:	November 8, 2010

Term: Late Fall 2010 (11/16/10—1/31/11)

Petitions accepted:	August 9 to September 9, 2010*
Petitions not accepted after:	September 9, 2010**
Graduation date:	January 31, 2011

Term: Winter 2011 (2/7/11-4/11/11)

Petitions accepted:	October 18 to November 19, 2010*

Petitions not accepted after: November 19, 2010**
Graduation date: April 11, 2011

Term: Spring 2011 (4/18/2011-6/20/2011)
Petitions accepted: January 10 to February 9, 2011*
Petitions not accepted after: February 9, 2011**
Graduation date: June 20, 2011

Term: Summer 2011 (6/27/11-8/29/11)
Petitions accepted: March 21 to April 20, 2011*
Petitions not accepted after: April 20, 2011**
Graduation date: August 29, 2011

* Petitions submitted during this period are preliminarily reviewed by the program chair/advisor. Petitions submitted after this period only have a final review conducted at the end of the term for which the student submitted.

** Petitions submitted after this date are accepted for the next available term. During the preliminary review process, if the academic evaluation reflects completion or pending completion in a prior term, the program chair and division dean may recommend the petition to graduate be moved to the current term in session.

A student's graduation date is the last day of the academic term in which the student completes all requirements. The College holds only one commencement ceremony each year.

Participation in Commencement

A student may participate in the annual commencement ceremony if he or she meets all of the following requirements:

- The student will satisfactorily complete all requirements for an associate's degree during or before the Spring Term immediately preceding commencement, or the student can complete all remaining degree requirements during the Summer Term immediately following commencement. The ability to complete requirements in Summer Term is defined as needing no more than 15 credits, which may include the final cooperative education, clinical, or internship placement.
- Students earning a certificate which has required 45 or more credits in any of the last five years, may participate in commencement if all certificate requirements will be completed during or before the Spring Term immediately proceeding commencement.
- The student has not previously participated in a Cincinnati State commencement ceremony to receive the same degree.
- The student has submitted a petition to graduate to the Office of the Registrar, by the published deadline applicable to the term when the student will complete all degree requirements.
- The student has submitted an Intent to Participate in Graduation form to the Office of Student Activities by the published deadline.

Graduation Honors

Associate's degree candidates who earn at least 45 credit hours at Cincinnati State and achieve a cumulative grade point average of 3.50 or higher will graduate with honors. Honors are classified as follows:

Cum Laude	3.500 - 3.799
Magna Cum Laude	3.800 - 3.899
Summa Cum Laude	3.900 - 4.000

Honors designations in the printed program at commencement are projected based on GPA calculations made at the end of the Winter Term. The student's GPA at the conclusion of the program will determine the final honors designation.

Academic Integrity Policy of Cincinnati State Technical and Community College

Ethical conduct is the obligation of every member of the Cincinnati State Technical and Community College community. Violations of academic integrity constitute serious breaches of ethical behavior. Academic integrity requires that all academic work be wholly the product of an identified individual.

Violations of Academic Integrity

The following acts of misconduct are subject to disciplinary actions as described in Article III, section 2. a. of the Cincinnati State Technical and Community College Student Code of Conduct.

Cheating: Cheating includes, but is not limited to:

- Use of any unauthorized assistance in taking quizzes, tests, or examinations, or completing assignments.
- Dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or completing assignments.
- The acquisition, without permission, of tests or other academic materials belonging to a member of the College faculty or staff.
- Copying computer files, text, or images of other students or downloading information from the Internet and representing this work as one's own.

Fabrication: The falsification or invention of any information or citation in an academic exercise. "Invented" information may not be used in any laboratory experiment or other academic exercise without authorization from the instructor. For example, it is improper to analyze one sample in an experiment and covertly "invent" data based on that single experiment for several more required analyses.

Facilitating academic dishonesty: Knowingly or negligently allowing one's own work to be used by other students or otherwise aiding in academic dishonesty.

Plagiarism: The representation of the words or ideas of another as one's own in any academic exercise. To avoid plagiarism, every direct quotation must be identified by quotation marks or by appropriate indentation and must be properly cited in the text or in a footnote. Acknowledgement is required when material from another source is paraphrased or summarized in whole or in part in one's own work. The correct form for documenting direct quotations and for acknowledging paraphrased material may be found in numerous writing manuals or handbooks. The English faculty at Cincinnati State endorse the MLA style. However, some instructors may require other types of documentation. Students should refer to the instructor's syllabus for guidance on the proper style.

Denying others access to information or material: Denying others access to scholarly resources or deliberately impeding the progress of another student. Examples of offenses of this type include giving other students false or misleading information, making library material unavailable to others by stealing or defacing books or journals, or by deliberately misplacing or destroying reserved materials, stealing another's paper or project, or altering computer files that belong to another person.

Academic Integrity Violations Procedure

If an instructor has reason to believe a violation of academic integrity has occurred, the procedure will start in the classroom as outlined by the instructor's syllabus. Penalties imposed by the instructor are limited to those actions whose ramifications fall within the confines of the class, i.e., failure of the assignment or failure of the course. Only the Academic Vice President (AVP) can impose suspension or dismissal from the College. The instructor has the option of filing a report of the incident with the AVP for documentation purposes.

The instructor may proceed with a formal charge of academic dishonesty and recommended sanctions to the AVP. The AVP may administer the disciplinary action recommended by the faculty member or a penalty deemed more appropriate. If the student accepts the charge, the AVP will assign sanctions, and the case will be closed. If the student challenges the finding of the AVP and maintains his/her innocence, the case will move forward to an Academic Integrity Panel. The student must submit the challenge to the AVP within five working days of the AVP's notification of sanctions.

The Academic Integrity Panel consists of:
- Two students appointed by the Student Senate
- Two faculty members appointed by the Faculty Senate
- One dean appointed by the Academic Vice President

The case will be heard within 10 working days of receipt of the student's written challenge.

The student accused of Academic Dishonesty may be accompanied at the Academic Integrity hearing by a person or persons of his/her choice, not to exceed three individuals. The role of the persons accompanying the student is limited to providing support to the student. Individuals accompanying the student may not present information or answer questions in place of the student.

- Both the Academic Integrity Panel and the student may call witnesses for the hearing.
- All hearings will be closed.

The decision of the Academic Integrity Panel regarding the guilt of the student is reached by majority vote in a session of panel members only. The decision of the panel is communicated in writing to the AVP, along with recommended sanctions, within 10 working days of the final day of panel hearings. The findings of the Academic Integrity Panel and penalty administered by the AVP are final.

Penalties

Possible sanctions are described in Article IV, section 2. of the Cincinnati State Technical and Community College Student Code of Conduct. They include:
- Warning
- Probation
- Loss of privileges
- Fines
- Restitution
- Discretionary sanctions
- College suspension
- College expulsion

In each case of academic dishonesty that is brought forward to the office of Academic Affairs, the AVP or the Academic Integrity Panel determines the disciplinary action to be taken. The AVP administers the disciplinary action.

Student Rights & Responsibilities

Introduction

An important part of the mission of the College is the adherence to the principles of student rights and freedoms, as amplified by the "Joint Statement on Rights and Freedoms of Students," which was formulated by representatives of the American Association of University Professors, United States Student Association, Association of American Colleges, National Association of Student Personnel Administrators, National Association for Women Educators, and a number of other professional bodies. These principles speak to the standards and responsibilities of the academic community to ensure student access to education; free discussion in the classroom; maintenance of student records; the freedom to form organizations that promote the common interests of students, and the freedom of inquiry and expression; student participation in institutional government; as well as expectations of student conduct, and the exercise of rights of citizenship. Complete copies of the statement are available from the Dean of Enrollment and Student Development.

Non-Discrimination Policy

Cincinnati State Technical and Community College affirms that no person shall, on the basis of race, color, national origin, sex and/or disability, be denied the benefits of, or be subjected to discrimination under any educational program or activity conducted under its auspices. This shall extend to employees therein and admission thereto. Inquiries concerning the application of this policy may be referred to the Executive Vice President of the College or to the coordinator designated below.

The Board of Trustees of Cincinnati State Technical and Community College has designated Eugene L. Breyer, Jr., director of human resources, as the Title VI, Title IX, and Section 504 coordinator for the College.

Complaints under Title VI (race, color and national origin), Title IX (sex), and/or Section 504 (disability) should be referred to:
Eugene L. Breyer, Jr.
Director of Human Resources
Cincinnati State Technical and Community College
Room 176, Main Building
3520 Central Parkway
Cincinnati, Ohio, 45223-2690

(513) 569-1564 phone
(513) 569-1719 fax
eugene.breyer@cincinnatistate.edu

Dissemination Procedure:

This policy shall be disseminated through the following means:
- Cincinnati State website
- Student Handbook
- College Catalog
- Administrator's Manual
- Student Code of Conduct (by reference)
- Adjunct Handbook
- New Employee Orientations
- College-wide postings
- Admissions Book
- First Year Education (FYE) course, required of all new students

Legal References:
- Civil Rights Act of 1964, as amended in 1972, Title VI, Title VII
- Executive Order 11246, 1965, as amended by Executive Order 11375
- Equal Employment Opportunity Act of 1972, Title VII
- Education Amendments of 1972, Title IX (P.L. 92-318)
- 45 CFR, Parts 81, 86 (Federal Register June 4, 1985, August 11, 1975)
- Public Law 93-162 (Section 504)

Title IX and Section 504 Grievance Procedures

Students Alleged Discrimination Grievance Procedures

In accordance with federal and state Office for Civil Rights (OCR) guidelines, any student who believes that Cincinnati State Technical & Community College or any of the College's staff, instructors, and/or administrators have inadequately applied the principles and/or regulations of Title VI of the Civil Rights Act of 1964 (race, color, national origin), Title IX of the Education Amendment Act of 1972 (sex/gender), and/or Section 504 of the Rehabilitation Act of 1973 (disability) may bring forward a complaint which shall be referred to as a formal grievance. However, whenever possible and practical, an informal solution to the alleged grievance is encouraged and should be attempted with the division dean or assistant dean.

If an informal acceptable solution cannot be attained, the student shall reduce the complaint to writing and formal Title IX and Section 504 grievance procedures shall commence. The complainant may file her/his complaint directly with the OCR, United States Department of Education, and/or use the internal grievance set forth as follows:

Step 1
An alleged formal discrimination grievance complaint should first be made to the Dean of Enrollment and Student Development within 10 school days from the date of the incident.

Step 2
If not resolved at Step 1, the decision may be appealed to the College's Title VI/Title IX/Section 504 coordinator within five school days from the date of the Step 1 decision.

Title VI/Title IX/Section 504 Coordinator:
Eugene L. Breyer, Jr.
Director of Human Resources
Cincinnati State Technical and Community College
Room 176, Main Building
3520 Central Parkway
Cincinnati, Ohio, 45223-2690

(513) 569-1564 phone
(513) 569-1719 fax
eugene.breyer@cincinnatistate.edu

Step 3
If not resolved at Step 2, the decision may be appealed to the College's Executive Vice President, who functions as the final mediator at the local level, within five school days from the date of the Step 2 decision.

Step 4
If not resolved at Step 3, the decision may be appealed by the complainant to the OCR, U.S. Department of Education, 55 Erieview Plaza, Room 300, Cleveland, Ohio, 44114-1816.

Code of Conduct

This Student Code of Conduct is promulgated under the provisions of Ohio Revised Code section 111.15, amplifies Chapter 3346.21 and modifies Ohio Administrative Code Rules 3367:4-1-98 and 3357:4-52 as they apply to student behavior and conduct.
(Adapted from the Journal of College and University Law Published by the National Association of College and University Attorneys and the Notre Dame Law School)

Questions about this code should be directed to:
Anthony Cruz
Dean, Enrollment and Student Development
Cincinnati State Technical and Community College
Room 163, Main Building
3520 Central Parkway
Cincinnati, Ohio 45223-2690

(513) 569-1640 phone
anthony.cruz@cincinnatistate.edu

3357:4-1-99
Student Code of Conduct

A. Article I: Definitions

1. The term "College" means Cincinnati State Technical and Community College.
2. The term "student" includes all persons taking courses at the College both full-time and part-time, pursuing undergraduate or professional studies and those who attend post-secondary educational institutions other than Cincinnati State Technical and Community College. Persons who are not officially enrolled for a particular term but who have a continuing relationship with the College are considered "students."
3. The term "faculty member" means any person hired by the College to conduct classroom activities.
4. The term "college official" includes any person employed by the College performing assigned administrative or professional responsibilities.
5. The term "member of the college community" includes any person who is a student, faculty member, College official, or any other person employed by the College. A person's status in a particular situation shall be determined by the chief student services officer.
6. The term "college premises" includes all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by the College including adjacent streets and sidewalks.
7. The term "organization" means any number of persons who have complied with the formal requirements for College recognition or registration.
8. The term "judicial body" means any person or persons authorized by the chief student services officer to determine whether a student has violated the student code and to recommend imposition of sanctions.
9. The term "judicial advisor" means the chief student services officer or a college official authorized on a case-by-case basis by the chief student services officer to impose sanctions upon students found to have violated the student code. The chief student services officer may authorize a judicial advisor to serve simultaneously as a judicial advisor and the sole member or one of the members of a judicial body. Nothing shall prevent the chief student services officer from authorizing the same judicial advisor to impose sanctions in all cases.
10. The term "appellate board" means any person or persons authorized by the chief student services officer to consider an appeal from a judicial body's determination that a student has violated the student code or from the sanctions imposed by the judicial advisor.
11. The term "shall" is used in the imperative sense.
12. The term "may" is used in the permissive sense.
13. The chief student services officer is that person designated by the College president to be responsible for the administration of the student code.
14. The term "policy" is defined as the written regulations of the College as found in, but not limited to, the student code handbook, and undergraduate catalogs.
15. The term "cheating" includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes or examinations; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the College faculty or staff.
16. The term "plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

B. Article II: Judicial Authority

1. The judicial advisor shall determine the composition of judicial bodies and appellate boards and determine which judicial body, judicial advisor, and appellate board shall be authorized to hear each case.
2. The judicial advisor shall develop policies for the administration of the judicial program and procedural rules for the conduct of hearings which are consistent with provisions of the student code.
3. Decisions made by judicial body and/or judicial advisor shall be final, pending the normal appeal process.
4. A judicial body may be designated as arbiter of disputes within the student community in cases which do not involve a violation of the student code. All parties must agree to arbitration, and to be bound by the decision with no right of appeal.

C. Article III: Proscribed Conduct

1. Jurisdiction of the College
   Generally, College jurisdiction and discipline shall be limited to conduct which occurs on College premises or which adversely affects the College community and/or the pursuit of its objectives.
2. Conduct - Rules and Regulations
   Any student found to have committed the following misconduct is subject to the disciplinary sanctions outlined in Article IV:
   a. Acts of dishonesty, including but not limited to:
      i. Cheating, plagiarism, or other forms of academic dishonesty.
      ii. Furnishing false information to any College official, faculty member, or office.
      iii. Forgery, alteration, or misuse of any College document, record, or instrument of identification.
      iv. Tampering with the election of any College-recognized student organization.
   b. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, other College activities, including its public-service functions on or off campus, or other authorized non-College activities, when the act occurs on College premises.
   c. Physical abuse, verbal abuse, threats, intimidation, harassment, coercion, and/or other conduct which threatens or endangers the health or safety of any person.
   d. Attempted or actual theft of and/or damage to property of the College or property of a member of the College community or other personal or public property.
   e. Hazing, defined as an act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in, a group or organization.
   f. Failure to comply with directions of College officials or law enforcement officers acting in performance of their duties and/or failure to identify oneself to

these persons when requested to do so.

g. Unauthorized possession, duplication, or use of keys to any College premises or unauthorized entry to or use of College premises.
h. Violation of published College policies, rules, or regulations.
i. Violation of federal, state, or local law on College premises or at College-sponsored or supervised activities.
j. Use, possession, or distribution of narcotic or other controlled substances except as expressly permitted by law.
k. Use, possession, or distribution of alcoholic beverages except as expressly permitted by law and College regulations, or public intoxication.
l. Illegal or unauthorized possession of firearms, explosives, other weapons, or dangerous chemicals on College premises.
m. Participation in a campus demonstration which disrupts the normal operations of the College and infringes on the rights of other members of the College community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus.
n. Obstruction of the free flow of pedestrian or vehicular traffic on College premises or at College-sponsored or supervised functions.
o. Conduct which is disorderly, lewd, or indecent; breach of peace; or aiding, abetting, or procuring another person to breach the peace on College premises or at functions sponsored by, or participated in by, the College.
p. Theft or other abuse of computer time, including but not limited to:
    i. Unauthorized entry into a file, to use, read, or change the contents, or for any other purpose.
    ii. Unauthorized transfer of a file.
    iii. Unauthorized use of another individual's identification and password.
    iv. Use of computing facilities to interfere with the work of another student, faculty member, or College official.
    v. Use of computing facilities to send obscene or abusive messages.
    vi. Use of computing facilities to interfere with normal operation of the College computing system. (See Appendix I for entire policy.)
q. Abuse of the judicial system, including but not limited to:
    i. Failure to obey the summons of a judicial body or College official.
    ii. Falsification, distortion, or misrepresentation of information before a judicial body.
    iii. Disruption or interference with the orderly conduct of a judicial proceeding.
    iv . Institution of a judicial proceeding knowingly without cause.
    v. Attempting to discourage an individual's proper participation in, or use of, the judicial system.
    vi. Attempting to influence the impartiality of a member of a judicial body prior to, and/or during, and/or after a judicial proceeding.
    vii. Harassment (verbal or physical), and/or intimidation of a member of a judicial body prior to, during, and/or after a judicial proceeding.
    viii. Failure to comply with the sanction(s) imposed under the student code.
    ix. Influencing or attempting to influence another person to commit an abuse of the judicial system.

3. Violation of Law and College Discipline
    a. If a student is charged only with an off-campus violation of federal, state, or local laws, but not with any other violation of this code, disciplinary action may be taken by the College and sanctions imposed for grave misconduct which demonstrates flagrant disregard for the College community. In such cases, no sanction may be imposed unless the student has been found guilty in a court of law or has declined to contest such charges, although not actually admitting guilt (e.g., "no contest" or "nolo contendere").
    b. Cincinnati State Technical and Community College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this student code, for example, if both violations result from the same factual situation, without regard to the pendency of civil litigation in court or criminal arrest and prosecution. Proceedings under this student code may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.
    c. When a student is charged by federal, state, or local authorities with a violation of law, the College will not request or agree to special consideration for that individual because of his or her status as a student. If the alleged offense is also the subject of a proceeding before a judicial body under the student code, however, the College may advise off-campus authorities of the existence of the student code and of how such matters will be handled internally within the College community. The College will cooperate fully with law enforcement and other agencies in the enforcement of criminal law on campus and in the conditions imposed by criminal courts for the rehabilitation of student violators. Individual students and faculty members, acting in their personal capacities, remain free to interact with government representatives as they deem appropriate.

D. Article IV: Judical Policies

1. Charges and Hearing
    a. Any member of the College community may file charges against any student for misconduct. Charges shall be prepared in writing and directed to the judicial advisor, or the administrative designee, responsible for the administration of the College judicial system. Any charge should be submitted as soon as possible after the event takes place, preferably within 24 hours.

        In the event of an incident that is life threatening or that poses serious injury, the campus police department will operate as the judicial advisor designee. The judicial advisor or the administrative designee will be notified as soon as possible, not later than 24 hours after the incident.
    b. The judicial advisor, or the administrative designee, may conduct an investigation to determine if the charges have merit and/or if they can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to the judicial advisor. Such disposition shall be final and there shall be no subsequent proceedings. If the charges cannot be disposed of by mutual consent, the judicial advisor may later serve in the same matter as the judicial body or a member thereof.
    c. All charges shall be presented to the accused student in written form. A time shall be set for a hearing, not less than five nor more than 15 calendar days after the student has been notified. Maximum time limited for scheduling of hearings may be extended at the discretion of the judicial advisor.

d. Hearings shall be conducted by a judicial body according to the following guidelines:
   i. Hearings normally shall be conducted in private. At the request of the accused student, and subject to the discretion of the judicial advisor, a representative of the student press may be admitted, but shall not have the privilege of participating in the hearing.
   ii. Admission of any person to the hearing shall be at the discretion of the judicial body and/or its judicial advisor.
   iii. In hearings involving more than one accused student, the judicial advisor of the judicial body, in his/her discretion, may permit the hearings concerning each student to be conducted separately.
   iv. The complainant and the accused have the right to be assisted by any advisor they choose, at their own expense. The advisor may be an attorney. The complainant and/or the accused is responsible for presenting his or her case and, therefore, advisors are not permitted to speak or to participate directly in any hearing before a judicial body.
   v. The complainant, the accused and the judicial body shall have the privilege of presenting witnesses, subject to the right of cross examination by the judicial body.
   vi. Pertinent records, exhibits, and written statements may be accepted as evidence for consideration by a judicial body at the discretion of the judicial advisor.
   vii. All procedural questions are subject to the final decision of the judicial advisor of the judicial body.
   viii. After the hearing, the judicial body shall determine (by majority vote if the judicial body consists of more than one person) whether the student has violated each section of the student code which the student is charged with violating.
   ix. The judicial body's determination shall be made on the basis of whether it is more likely than not that the accused student violated the student code.

e. There shall be a single verbatim record, such as a tape recording of all hearings before a judicial body. The record shall be the property of the College.

f. Except in the case of a student charged with failing to obey the summons of a judicial body or College official, no student may be found to have violated the student code solely because the student failed to appear before a judicial body.

   In all cases, the evidence in support of the charges shall be presented and considered.

2. Sanctions
   a. The following sanctions may be imposed upon any student found to have violated the student code.
      i. Warning - a notice in writing to the student that the student is violating or has violated institutional regulations.
      ii. Probation - a written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation(s) during the probationary period.
      iii. Loss of privileges - denial of specified privileges for a designated period of time.
      iv. Fines - previously established and published fines may be imposed.
      v. Restitution - compensation for loss, damage, or injury. This may take the form of appropriate service and/or monetary or material replacement.
      vi. Discretionary sanctions - work assignments, service to the College, or other related discretionary assignments (such assignments must have the prior approval of the judicial advisor).
      vii. College suspension - separation of the student from the College for a definite period of time, after which the student is eligible to return. Conditions for re-admission may be specified.
      viii. College expulsion - permanent separation of the student from the College.
   b. More than one of the sanctions listed above may be imposed for any single violation.
   c. Other than College expulsion, disciplinary sanctions shall not be made part of the student's permanent academic record, but shall become part of the student's confidential record. Upon graduation, the student's confidential record may be expunged of disciplinary actions other than College suspension or College expulsion upon application to the judicial advisor. Cases involving the imposition of sanctions other than College suspension or College expulsion shall be expunged from the student's confidential record three years after final disposition of the case.
   d. The following sanctions may be imposed upon groups or organizations:
      • Those sanctions listed above in paragraphs c. 2. a. i. to c. 2. a. viii.
      • Deactivation-loss of all privileges, including College recognition, for a specified period of time.
   e. In each case in which a judicial body determines that a student has violated the student code, the sanction(s) shall be determined and imposed by the judicial advisor. In cases in which persons other than or in addition to the judicial advisor have been authorized to serve as the judicial body, the recommendation of all members of the judicial body shall be considered by the judicial advisor in determining and imposing sanctions. The judicial advisor is not limited to sanctions recommended by members of the judicial body. Following the hearing, the judicial body and the judicial advisor shall advise the accused in writing of its determination and of the sanction(s) imposed, if any.
3. Interim Suspension
   In certain circumstances, the chief student services officer or designee may impose a College suspension prior to the hearing before a judicial body:
      i. Interim suspension may be imposed only: a) to ensure the safety and well-being of members of the College property; b) to ensure the student's own physical or emotional safety and well-being; or c) if the student poses a definite threat of disruption of or interference with the normal operations of the College.
      ii. A standing appellate board will be formed at the direction of the chief student services officer who will ensure that it is fairly composed of representatives of the student body, staff, faculty, and administration of Cincinnati State Technical and Community College.
      iii. During the interim suspension, students shall be denied access to the campus (including classes) and/or all other College activities or privileges for which the student might otherwise be eligible, as the chief student services officer or the judicial advisor may determine to be appropriate.
4. Appeals
   a. A decision reached by the judicial body or a sanction imposed by the judicial advisor may be appealed by accused students or complainants to an appellate board within five school days of the decision. Such

appeals shall be in writing and shall be delivered to the chief student services officer, judicial advisor, or his/her designee. The appellate board shall be composed of seven members, four chosen by the chief student services officer, and three chosen by the accused student or complainant. All shall be members of the College community.

b. Except as required to explain the basis of new evidence, an appeal shall be limited to review of the verbatim records of the initial hearing and supporting documents for one or more of the following purposes:
   i. To determine whether the original hearing was conducted fairly in light of the charges and evidences presented, and in conformity with prescribed procedures, giving the complaining party a reasonable opportunity to prepare and present evidence that the student code was violated, and giving the accused student a reasonable opportunity to prepare and to present a rebuttal of those allegations.
   ii. To determine whether the decision reached regarding the accused student was based on substantial evidence, that is, whether the facts in the case were sufficient to establish that a violation of the student code occurred.
   iii. To determine whether the sanction(s) imposed were appropriate for the violation of the student code which the student was found to have committed.
   iv. To consider new evidence, sufficient to alter a decision, or other relevant facts not brought out in the original hearing, because such evidence and/or facts were not known to the person appealing at the time of the original hearing.

c. If an appeal is upheld by the appellate board, the matter shall be remanded to the original judicial body and judicial advisor for re-opening of the hearing to allow reconsideration of the original determination and/or sanction(s).

d. In cases involving appeals by students accused of violating the student code, review of the sanction by the appellate board may not result in more severe sanction(s) for the accused student. Instead, following an appeal, the chief student services officer may, upon review of the case, reduce, but not increase, the sanctions imposed by the judicial advisor.

e. In cases involving appeals by persons other than students accused of violating the student code, the chief student services officer may, upon review of the case, reduce or increase the sanctions imposed by the judicial advisor or remand the case to the original judicial body and judicial advisor.

E. Article V: Interpretation and Review

1. Any question of interpretation regarding the student code shall be referred to the chief student services officer for final determination.
2. The student code will be reviewed every three years under the direction of the chief student services officer and/or judicial advisor.

last revised: 4/15/00

Cincinnati State Policy on Responsible Use of Information Technology and Resources

Introduction and General Statement About Responsible Use of Information Technology and Resources

Introduction

This policy contains the College's philosophy, policy, rules and standards regulating the use of technology resources. It is the responsibility of all students and all who are employed by the College, whether they are employed as students, temporary personnel, contractors, consultants, staff, or faculty to implement and comply with this policy and all other applicable regulations and to maintain the highest standard of ethics when dealing with information technology resources.

Note: This policy conforms to Ohio IT Policy ITP-E.8 "Use of E-mail, Internet and Other IT Resources."

General Statement

In support of its mission of teaching and community service, Cincinnati State Technical and Community College acquires, develops, maintains, and provides access to information technology and resources for students, temporary personnel, contractors, consultants, faculty, and staff. These resources include but are not limited to telecommunications systems, computers, laptops, PDA's, computer terminals, peripheral computer hardware, software, networks, and the information that can be accessed using these tools. These computing resources are intended for College-related use, including direct and indirect support of the College's instruction, research, and service missions; College administrative functions; student and campus life activities; and the free exchange of ideas.

The rights of free expression and academic freedom apply to the use of College computing resources. So, too, however, do the responsibilities and limits associated with those rights. All who use the College's computing resources must act responsibly, in accordance with the highest standard of ethical and legal behavior. Thus, legitimate use of computing resources does not extend to whatever is technically possible. Users must abide by all applicable restrictions, whether or not they are built into the client device, operating system, application software, or network and whether or not they can be circumvented by technical means.

This policy applies to all users of College computing resources, whether affiliated with the College or not, and whether the users access resources from on campus or remote locations. This policy applies equally to College-owned or College-leased technology resources. Additional policies may apply to specific computers, computer systems or networks provided or operated by specific units of the College or to uses within specific units.

Policy Statement

All College computing resource users must:

1. Comply with all federal, Ohio and other applicable laws; all generally applicable College rules and policies; and all applicable contracts and licenses. Examples of such laws, rules, polices, contracts, and licenses include: the laws of libel, privacy, copyright, trademark, obscenity, and child pornography; the Family Educational Rights and Privacy Act (FERPA); the Health Insurance Portability and Accountability Act (HIPAA); the Electronic Communications Privacy Act and the Computer Fraud and Abuse Act, which prohibit "hacking", "cracking", and similar activities; the College's code of student conduct; the Cincinnati State Technical and Community College

Administrators' Manual, Faculty Handbook, the College's sexual harassment policy; and all applicable software licenses.

Users must respect copyrights, intellectual-property rights, ownership of files and passwords. Unauthorized copying of files or passwords belonging to others or to the College may constitute plagiarism or theft. Accessing or modifying files without authorization (including altering information, introducing viruses or Trojan horses, or damaging files) is unethical, may be illegal, and may lead to sanctions.

Users who engage in electronic communications with persons in other states or countries or on other systems or networks should be aware that they may also be subject to the laws of those other states and countries and the rules and policies of those other systems and networks. Users are responsible for ascertaining, understanding, and complying with the laws, rules, policies, contracts, and licenses applicable to their particular uses.

Cincinnati State extends these policies and guidelines to systems outside the College that are accessed via the College's facilities (e.g., electronic mail or remote logins using the College's Internet connections).

2. Use only those computing resources that they are authorized to use and use them only in the manner and to the extent authorized. Ability to access computing resources does not, by itself, imply authorization to do so. Users are responsible for ascertaining what authorizations are necessary and for obtaining them before proceeding. Accounts, passwords, and other authentication mechanisms, may not, under any circumstances, be shared with, or used by, persons other than those to whom they have been assigned by the College.

3. Respect the finite capacity of those resources and limit use so as not to consume an unreasonable amount of those resources or to interfere unreasonably with the activity of other users. Although there is no set bandwidth, disk space, CPU time, or other limit applicable to all uses of College computing resources, the College may require users of those resources to limit or refrain from specific uses in accordance with this principle. The reasonableness of any particular use will be judged in the context of all of the relevant circumstances.

4. Limit the personal use of College computing resources and refrain from using those resources for personal commercial purposes or for personal financial or other gain. Personal use of College computing resources is permitted on a limited basis when it does not interfere with the performance of the user's job or other College responsibilities, and is otherwise in compliance with this and other College policy. College computing resources are not to be used for commercial purposes without written authorization from the College. In such cases, the College may require payment of appropriate fees. This usage does not include links to personal web pages. This usage is subject to monitoring by the ITS staff. Further limits may be imposed upon personal use in accordance with normal supervisory procedures.

   Any personal use of computing resources that disrupts or interferes with College business, incurs an undue cost to the College, could potentially embarrass or harm the College, or has the appearance of impropriety is strictly prohibited. Personal use that is strictly prohibited includes, but is not limited to, the following:
   - Violation of law: Violating or supporting and encouraging the violation of local, state or federal law is strictly prohibited.
   - Illegal copying: Downloading, duplicating, disseminating, printing or otherwise using copyrighted materials, such as software, texts, music and graphics, in violation of copyright laws is strictly prohibited.
   - Operating a business: Operating a business, directly or indirectly, for personal gain is strictly prohibited.
   - Accessing personals services: Accessing or participating in any type of personals ads or services, such as or similar to dating services, matchmaking services, companion finding services, pen pal services, escort services, or personals ads is strictly prohibited.
   - Accessing sexually explicit material: Downloading, displaying, transmitting, duplicating, storing or printing sexually explicit material is strictly prohibited.
   - Harassment: Downloading, displaying, transmitting, duplicating, storing or printing material that is offensive, obscene, threatening or harassing is strictly prohibited.
   - Gambling or wagering: Organizing, wagering on, participating in or observing any type of gambling event or activity is strictly prohibited.
   - Mass e-mailing: Sending unsolicited e-mails or facsimiles in bulk or forwarding electronic chain letters in bulk to recipients inside or outside the state environment is strictly prohibited.
   - Solicitation: Except for agency-approved efforts, soliciting for money or support on behalf of charities, religious entities or political causes is strictly prohibited.
   - Damage or theft: Any attempt by users to damage or disrupt the operation of computing equipment, communications equipment, or communications lines; or attempting to remove College owned or leased equipment without written approval of Chief Information Officer (CIO) is strictly prohibited and will be subject to disciplinary action.
   - Participation in online communities: Any use of state-provided IT resources to operate, participate in, or contribute to an online community including, but not limited to, online forums, chat rooms, listservs, blogs, wikis, peer-to-peer file sharing, and social networks, is strictly prohibited unless organized or approved by the agency.
   - Internet security: A public servant participating in an online community organized or approved by the agency shall adhere to the security requirements and policies by the College.
   - Unauthorized installation or use of software: Installing, copying, or using software including, but not limited to, instant messaging clients and peer-to-peer file sharing software, or personally-owned software, without the approval of the CIO is strictly prohibited. Installation and use of unlicensed software is strictly prohibited.
   - Copying College-owned or licensed software or data for personal or external use without prior written approval; or attempting to modify or copy College-owned or another users licensed software or data without prior approval is strictly prohibited.
   - Unauthorized installation or use of hardware: Installing, attaching, or physically or wirelessly connecting any kind of hardware device to any state-provided IT resource, including computers and network services, without prior authorization is strictly prohibited.

5. Refrain from stating or implying that they speak on behalf of the College and from using College trademarks and logos without authorization to do so. Affiliation with the College does not, by itself, imply authorization to speak on behalf of the College. Authorization to use College trademarks and logos may be granted only by Cincinnati State. The use of appropriate disclaimers is encouraged. Personal web pages linked to the College website should disclaim association with Cincinnati State.

6. Respect that there is no expectation of privacy. This policy serves as notice to users that they shall have no reasonable expectation of privacy in conjunction with their use of College-provided IT resources. Contents of College computers may be subject to review, investigation, and public disclosure. Access and use of the Internet, including communication by e-mail and instant messaging and the content thereof, are not confidential, except in certain limited cases recognized by state or federal law. The College reserves the right to view any files and electronic communications on state college computers, monitor and log all electronic activities, and report findings to appropriate supervisors and authorities.

While the College does not routinely monitor individual usage of its computing resources, the normal operation and maintenance

of College computing resources requires the backup and caching of data and communications, the logging of activity, the monitoring of general usage patterns, and other such activities that are necessary for the rendition of service.

The College may also monitor the activity and accounts of individual users of College computing resources, including individual sessions and communications, without notice. This may occur:

a) When the user has voluntarily made them accessible to the public, as by posting to Usenet or a website;

b) When it reasonably appears necessary to do so to protect the integrity, security, or functionality of College or other computing resources or to protect the College from liability;

c) When there is reasonable cause to believe that the user has violated, or is violating, this policy;

d) When an account or device appears to be engaged in unusual or unusually excessive activity, as indicated by the monitoring of general activity and usage patterns; or

e) When it is otherwise required or permitted by law

Any such individual monitoring, other than that specified in "(a)", or required by law, or necessary to respond to perceived emergency situations, must be authorized in advance by the Chief Information Officer (CIO) or a designee of same.

The College, at its discretion, may disclose the results of any such general or individual monitoring, including the contents and records of individual communications, to appropriate College personnel or law enforcement agencies and may use those results in appropriate College disciplinary proceedings

Impeding access: Impeding the College's ability to access, inspect and monitor IT resources is strictly prohibited. A user shall not encrypt or conceal the contents of any file or electronic communications on state computers without proper authorization. A user shall not set or manipulate a password on any college computer, program, file or electronic communication without proper authorization

Misrepresentation: Concealing or misrepresenting one's name or affiliation to mask unauthorized, fraudulent, irresponsible, or offensive behavior in electronic communications is strictly prohibited.

Protection of College Data

Users of College information resources—especially faculty and staff—have a responsibility to protect sensitive information. This includes but is not limited to student and employee personal information and College financial data. All users are expected to report suspected or discovered security incidents, such as social engineering and virus attacks.

Privacy and Security

Information technology provides important means of communication, both public and private. Users and system administrators must respect the privacy of person-to-person communication in all forms, including voice (telephone), text (electronic mail and file transfer), and image (graphics and television). The principle of freedom of speech will apply to public communications in all these forms.

The College employs various measures to protect the security of its computing resources and users accounts. However, users should be aware that the College does not and cannot guarantee such security.

Any use of College-provided IT resources that interferes with or compromises the security or operations of any computer system, or compromises public trust, is strictly prohibited. Privacy and security violations can be, but are not limited to the following:

- Confidentiality procedures. Using IT resources to violate or attempt to circumvent confidentiality procedures is strictly prohibited.
- Accessing or disseminating confidential information. Accessing or disseminating confidential information or information about another person without authorization is strictly prohibited.
- Accessing systems without authorization. Accessing networks, files or systems, or an account of another person without proper authorization is strictly prohibited. Users are individually responsible for safeguarding their passwords which means they are not to disclose them to another user.
- Distributing malicious code. Distributing malicious code or circumventing malicious code security is strictly prohibited.

Enforcement of this Policy

The College demands a high standard of conduct for all students, faculty and staff in the use of, and access to the College's information technology and resources. Anyone whose conduct misuses the College's information technology and resources is subject to College disciplinary action. This conduct includes, but is not limited to the aforementioned following policies and security and privacy issues.

Alleged violations of this policy shall be dealt with in accordance with the procedures in the Cincinnati State Technical and Community College personnel policies described in the Employee Handbook, Administrator's Manual, College collective bargaining agreements, and the Student Code of Conduct. The College treats violations of this policy seriously and will pursue criminal and civil prosecution where appropriate.

Whenever it becomes necessary to enforce College rules or policies, an authorized administrator may: disallow network connections by certain computers (even departmental and personal ones); require adequate identification of computers and users on the network; undertake audits of software or information on shared systems where policy violations are possible; take steps to secure compromised computers that are connected to the network; or deny access to computers, the network, and institutional software and databases.

Sanctions Regarding Misuse of Computing Resources

Users who violate this policy may be denied access to College computing resources and may be subject to other penalties and disciplinary action, both within and outside of the College. Violations will normally be handled through the College disciplinary procedures applicable to the relevant user. Alleged violations by students will normally be investigated, and the Student Services Office will normally impose any penalties or other discipline.

However, the College, through its information managers, may suspend or block access to an account prior to the initiation or completion of such procedures; when it reasonably appears necessary to do so, and in order to protect the integrity, security, or functionality of College or other computing resources; or to protect the College from liability.

Peer to Peer File Sharing Policy

1.0 Overview

Peer-to-Peer (P2P) applications have become the most popular and controversial method through which digital files of various formats and types are traded, shared, and distributed across the Internet.

While Cincinnati State Technical and Community College recognizes that there are legitimate uses for P2P applications, the College also understands that significant risks are implicit in the use of such applications.

The College does not seek to ban P2P file sharing from the campus network, and will continue to support academic freedom and any technologies that can be used to foster collaboration.

However, Cincinnati State must also protect its assets, its reputation, and its resources.

2.0 Purpose

This policy has been implemented in order to mitigate exposure of the Cincinnati State Technical and Community College to security risks and liabilities associated with the irresponsible use of P2P applications on College resources.

3.0 Scope

3.1 Resources

This policy shall apply to all computer workstations, laptops, servers, networked appliances, and any other device capable of participating in a P2P network if such device is owned by Cincinnati State; or any device utilizing College network resources, even if that device is owned privately or by a third party.

3.2 Individuals

This policy applies to faculty, staff, students, contractors, consultants, temporaries, and other workers at Cincinnati State, including all personnel affiliated with third parties at such time they are using any resource described under section 3.1.

4.0 Policy

4.1 Prohibited Activity

This policy strictly prohibits the distribution, downloading, uploading, or sharing of any material, software, data, document, sound, picture, or any other file that is:

- Specified as illegal by any federal or state law, statute, proclamation, order, or decree.
- Copyrighted and not authorized for distribution by the copyright owner.
- Considered to be proprietary, privileged, private, or otherwise vital to the operation of the College; including, but not limited to, personnel, student, financial, or strategic records and documents, or any material governed by federal and state regulations.
- Any virus or malware for the purpose of deployment or implementation with ill-intent.

Any P2P activity is strictly forbidden in the cases of:

- Computer labs
- Computer workstations and other network devices readily accessible to multiple users.
- Computer workstations and other network devices used in daily operation by areas and departments heavily affected by federally mandated regulatory compliance.
- Laptops, computer workstations, and any other network capable device provided by Information Technology through equipment services.

Users of Cincinnati State resources may not attempt to circumvent, bypass, defeat, or disrupt any device, method, or technology implemented by the College for the purpose of P2P mitigation.

4.2 Rights and Responsibilities

Students, faculty, staff, contractors, consultants, temporaries, and other workers at Cincinnati State shall bear legal/financial responsibility for events resulting from their own use of P2P applications.

Individual departments, colleges, administrative areas, and other entities must respond in a timely and efficient manner to all inquiries and complaints that arise in regard to this policy. Information Technology and Cincinnati State are required by federal law to report certain illegal activities to specified law enforcement agencies without notice to the user or the appropriate department.

College students are particularly vulnerable to the watchful eyes of the RIAA (Recording Industry Association of America) and the MPAA (Motion Picture Association of America). Copyright holders contact Cincinnati State on a regular basis demanding that the illegal distribution of their material be stopped.

4.3. Technology Mitigation

Information Technology will implement and maintain a network appliance specifically designed to control and track P2P usage. This technology called CopySense, by Audible Magic Corp can identify and block illegal sharing of copyrighted files while allowing other legitimate peer-to-peer uses to continue. P2P traffic will be limited in bandwidth, to ensure that network resources are available for all business- and education-related needs and processes.

P2P traffic may be blocked for specific areas described under section 4.2 of this policy.

Outbound P2P traffic positively identified as copyrighted material will be blocked. CopySense filters copyrighted peer-to-peer content by sensing an electronic fingerprint unique to the content itself. When a computer is found using software to obtain copyrighted material in violation of the DMCA, the computer network access will be suspended without notice.

P2P traffic and usage information will be collected, and the collected information will be governed by the policies set forth in section five of this document.

5.0 Privacy

5.1 Information and Collection

Logs detailing P2P traffic and usage on the Cincinnati State network will be collected.

Logs will contain IP addresses involved in data transfer, direction of transfer (if retrievable), metadata of file (if retrievable), time, protocol used, and amount of data transferred.

Logs will not contain any personal identifying information.

Logs will be kept for six weeks (42 days).

5.2 Information Use

Logs will be subject to periodic review for enforcement of this policy.

Information collected may be used in aggregate format for reporting purposes.

Individual usage will not be actively or routinely monitored. Logs maybe used to investigate complaints or suspicious traffic patterns.

Individual divisions, departments, functional or administrative areas, and entities of Cincinnati State may request information about P2P usage pertinent to that area. This request may only be made by the dean, chair, department head, manager, or other leadership of the area requesting information.

Information Technology will not release any information collected by the appliance to any entity external to Cincinnati State unless compelled or obligated by law or court order, subpoena, warrant, or writ; with the exception of Audible Magic Corporation, which will receive data exclusively in aggregate format, with no personal identifying information, for purposes of internal statistical analysis.

6.0 Enforcement

6.1 Faculty, Staff, and Students

Any faculty, staff, or student found to have violated this policy may be subject to disciplinary action, up to and including suspension, expulsion, and/or termination of employment in accordance with procedures defined by Cincinnati State administrative policies stated in the handbook governing that individual, criminal and/or civil prosecution.

6.2 External Entities

Any external entity, contractor, consultant, or temporary worker

found to have violated this policy may be held in breach of contract, and as such, may be subject to grievances or penalties allowed by such contract, criminal and/or civil prosecution.

7.0 Definitions

P2P, in the context of this policy, is defined as direct data communication between two or more network capable devices over the Internet or other network, usually for the purpose of sharing any data file (including, but not limited to: music, pictures, video, software, and documents).

P2P network, in the context of this policy, is defined as a collection of distributed network-capable devices participating in P2P activity.

P2P application is defined as any application that allows a network-capable device to participate in one or more P2P networks.

Sharing, in the context of this policy, describes the action and activity of making any data file available to one or more P2P networks.

Logs are defined as collections of information, typically used to document activity and events.

Uploading describes network trafficking of data files originating from the Cincinnati State network and destined for an external network.

Downloading describes network trafficking of data files originating form an external network and destined for the Cincinnati State network.

The Cincinnati State network and networking resources describe all materials and devices owned by the Cincinnati State Technical and Community College and used to provide network connectivity to any network capable device. This includes all jacks, cable, hubs, wireless access points, switches, and routers.

The Digital Millennium Copyright Act (1998), DMCA, seeks to protect copyright holders from the technological circumvention of previous copyright statues. In 1976 the concept of "Fair Use" was added to the existing copyright clause of the US Constitution. Fair use is not defined in the constitution; it was decided in the courts. There are, however, Supreme Court decisions that have defined fair use based on other cases that can reasonably be interpreted to mean the following:

- You can rip music that you have legally purchased to MP3s so that you have them in a digital format.
- You can store the songs in your computer or MP3 player, for you own personal use.
- You can burn your own "mix" CDs using your own CD collection, as long as you keep that mix CD in your possession.
- These same principles apply to movies, books, or any other copyrighted material that you may own.

Sexual Harassment Policy

Cincinnati State Technical and Community College affirms its commitment to ensuring an environment for all employees and students which is fair, humane, and respectful - an environment which supports and rewards employee and student performance on the basis of relevant considerations such as ability and effort. Behaviors which inappropriately assert sexuality as relevant to employee or student performance are damaging to this environment.

Title VII of the Civil Rights Act of 1969 and Title IX of the Educational Amendments of 1972 as interpreted by Federal Regulation prohibit sexual harassment.

Definition

Sexual favors may not be required explicitly or implicitly as a term or condition of an individual's employment or student status. The submission to or rejection of sexual favors may not be used as a basis for employment or educational decisions. Sexual conduct which has the purpose or effect of unnecessarily interfering with an individual's work or student performance or creating an intimidating, hostile, or offensive working or educational environment is prohibited.

Such conduct may include:

- Verbal harassment or abuse
- Subtle pressure for sexual activity
- Sexist remarks about a woman's or man's clothing, body, or sexual activities
- Unnecessary touching, patting, or pinching
- Leering or ogling of a woman's or man's body
- Constant brushing against a woman's or man's body
- Demanding sexual favors accompanied by implied or overt threats concerning one's job, grades, letters of recommendation, etc.
- Physical assault

Substance Abuse Policy

Cincinnati State Technical and Community College prohibits the unlawful manufacture, possession, use, or distribution of drugs on its property or as a part of its activities. Cincinnati State also prohibits the use or possession of alcoholic beverages on campus property except as authorized by campus policy. Students and staff may be accountable to both civil authorities and to the College administration for drug and alcohol-related actions which are a violation of federal, state, or local laws, or the College policy as stated below. In 1989, the College Board of Trustees approved the Drug-Free Workplace policy found below.

Policy For Drug-Free Workplace: 89.49

The unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Cincinnati State workplace. Employees who violate this prohibition are subject to disciplinary action up to and including immediate discharge.

All employees are obligated to the terms of this policy and must notify their immediate supervisor of conviction for any criminal drug statute violation occurring in the workplace no later than five days after such conviction.

Each employee of the College will receive a written copy of this policy statement regarding a Drug-Free Workplace and will be notified that, as a condition of employment, he or she must abide by this policy statement and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace not later than five days after such conviction.

Upon receiving notice that an employee who is engaged in the performance of a federal contract has had any criminal drug statute conviction for a violation occurring in the workplace, Cincinnati State will notify the federal contracting agency within 10 days. The College will impose a sanction on, or require participation in, a drug abuse assistance/rehabilitation program by the convicted employee.

Substance abuse is a serious problem in our society. In response to this problem, Cincinnati State offers the following educational activities and personal assistance to all members of the campus community.

- Annual distribution of this statement to all students and employees of the College.
- Health/wellness information, available in the services hallway of the Main Building.
- The Department of Athletics and Student Activities has an alcohol/drug education assistance program for athletes.
- Two College-wide workshops on issues dealing with substance abuse each academic year.
- Information and literature on substance abuse, available in the Advising and Counseling Center, Room 168 Main Building.
- Confidential counseling and referral to appropriate community

agencies is available to students, faculty, and staff who have alcohol or other substance abuse problems. Individuals may seek this assistance in the Advising and Counseling Center, Room 168 Main Building, or the Office of Human Resources.

Early recognition, intervention, and treatment for substance abuse is necessary to avoid detrimental effects to physical and mental health. Health risks associated with substance abuse include, but are not limited to:

- Physical dependence
- Psychological dependence
- Alterations in the body's immune system
- Digestive problems
- Liver complications
- Neuropsychological complications
- Nutritional deficiencies
- Certain cancers
- Cardiovascular complications
- Respiratory complications
- An increased risk of contracting AIDS
- Deterioration in learning ability, memory, and judgment
- Placental transfer resulting in low birth weight, mental retardation, congenital malformation, and neonatal addiction
- Moral deterioration
- Deterioration of personal relationships
- Death from continued substance abuse

Alcohol and the Law

Individuals have a responsibility to follow the laws of the city, state, and nation. Those who fail to live up to that responsibility face certain penalties. Some of the potential legal consequences of committing an alcohol-related criminal offense are listed in this statement.

Underage Consumption, Purchasing, or Possession of Alcohol

The legal drinking age in Ohio for consumption of an alcoholic beverage is 21 years old. Anyone purchasing, possessing, or consuming alcohol prior to their twenty-first birthday is guilty of a first-degree misdemeanor. The maximum penalties associated with this offense are six months imprisonment, a $1,000 fine, or both. A 20-year-old student, therefore, risks being imprisoned and fined when he or she decides to drink alcohol.

Providing Alcohol to an Underage Person

A person who furnishes alcohol to an underage person is guilty of a first-degree misdemeanor. The maximum penalties associated with this offense are six months imprisonment, $1,000 fine or both. A social host, therefore, risks being fined and imprisoned when he or she furnishes alcohol to a person he or she knows or should know is not 21 years of age.

False Identification

Possession or display of a fictitious operator's license is a first-degree misdemeanor. The offense includes mere possession of a fictitious license or display of someone else's valid operator's license. The maximum penalties for this offense are six months imprisonment, a $1,000 fine, or both. Moreover, if the fictitious operator's license is utilized to purchase alcohol or enter an establishment that serves alcohol, the minimum fine must be at least $250 and the person displaying the fictitious operator's license may have his or her valid operator's license suspended for three years.

Driving Under the Influence of Alcohol or Drugs (DUI)

In Ohio, a person may not operate a motor vehicle if he or she is impaired by alcohol and/or drugs. The maximum penalties for operating a vehicle while under the influence are six months imprisonment (mandatory three days in jail), a $1,000 fine, or both. In addition, the operator must forfeit his or her driving privileges for three months.

Open Container

It is illegal to possess in public an open container of an alcoholic beverage. If convicted of this offense, the maximum penalty is a $100 fine. Consumption of alcohol in a motor vehicle is a fourth degree misdemeanor with maximum penalties of 30 days imprisonment, a $250 fine, or both.

Disorderly Conduct

Disorderly conduct while intoxicated is a minor misdemeanor and carries a maximum penalty of a $100 fine. Disorderly conduct occurs when one recklessly causes inconvenience, annoyance, or alarm to another due to offensive conduct.

Federal and State Penalties for Sale and Possession

The Federal Government decides if and how a drug should be controlled. Psychoactive (mind-altering) chemicals are categorized according to Schedule I-V. This schedule designates whether the drug can be prescribed by a physician and under what conditions. Factors considered in this categorization include a drug's known and potential medical value, its potential for physical or psychological dependence, and risk, if any, to public health. Penalties for the illegal sale or distribution of a drug are established using the designation of Schedule I-V. Anyone with knowledge of a felony must report it to a law enforcement official.

Schedule I drugs have a high potential for abuse with no medical use. Production of these drugs is controlled. Examples include heroin, methaqualone, all hallucinogens (except phencyclidine-PCP), marijuana, and hashish. Tetrahydrocannabinol (THC), depending on its form, can also be a Schedule I drug.

Schedule II drugs have a high potential for abuse, but have some medical uses. Production of these drugs is controlled. Examples include opium, morphine, codeine, some other narcotics, barbiturates, cocaine, amphetamines, and phencyclidine (PCP).

Federal and state penalties for selling Schedule I and II drugs vary with the quantity of the drug. Additionally, if death or serious injury is associated with the sale and/or if it is a second offense, penalties are more severe. When establishing penalties for sale, marijuana, and hashish are separated from this designation according to the schedule. The penalties, however, are similar to those set for Schedule I and II drugs.

The federal penalty for first offense sale of small amounts of Schedule I and II drugs is not less than four years/not more than 40 years; if death or serious injury, not less than 20 years/not more than life; fine of not more than $2 million individual/$5 million other than individual.

In the State of Ohio the penalty for delivery, possession with intent to deliver, and manufacture of less than 25 grams is mandatory one to 20 years; up to $25,000; or life probation. The penalty for possession of less than 25 grams is up to four years, or fined up to $25,000 or both. Both are a felony. Use is a misdemeanor which has a penalty of up to two years, $2,000 fine, or both.

Schedule III, IV, and V drugs include those that most citizens would categorize as prescription drugs. Schedule III drugs have some potential for abuse, but less than Schedule I and II. The potential for abuse of Schedule IV drugs is less than Schedule III, and Schedule V is less than Schedule IV. All Schedule III-V drugs have medical uses and production is not controlled. Examples of these drugs include some narcotics, chloral hydrate (IV), barbiturates (III & IV), amphetamines (III), and other stimulants (III & IV).

The Federal penalty for first offense sale of a Schedule III drug is not more than five years; fine of not more than $250,000 individual/$1 million not individual. The federal penalty for first offense sale of Schedule IV drugs is not more than three years. The fine is the same as for Schedule III drugs. The federal penalty for first offense sale of Schedule V drugs is not more than one year; fine of not more than $100,000 individual/$250,000 not individual.

Sale of some Schedule III drugs is a felony and has a State of Ohio penalty of up to seven years; or a fine up to $5,000; or both. State of Ohio penalty for sale of Schedule IV drugs is a felony and has a penalty of up to four years; or a fine up to $2,000; or both. Sale of Schedule V drugs in the State of Ohio is also a felony and has a state penalty of up to two years; or a fine up to $2,000; or both.

For further information on substance abuse and early intervention and treatment, contact the Advising and Counseling Center, Room 168 Main Building, (513) 569-1544, or the Office of Human Resources, in Room 177 Main Building, (513) 569-1565.

Release of Information

Cincinnati State Technical and Community College, in accordance with the Family Educational Rights and Privacy Act of 1974, as amended, (FERPA) has designated the following information regarding its students as directory (public) information:

- Name
- Program
- Participation in officially recognized activities and sports
- Weight and height of members of intercollegiate athletic teams
- Dates of attendance
- Degrees and awards received (including dates of graduation and major)
- Most recent previous educational agency or institution attended
- Enrollment status (part-time or full-time), including date(s) of change(s) in status if specifically requested.

This information may be released without the written consent of the student. All other information is confidential and will be released to individuals or agencies outside of the College only with written consent from the student; as otherwise required by law; or to Cincinnati State's academic partners as described below.

Students have the right to withhold directory information from the public if they desire. Each student who wants all directory information withheld is required to inform the Office of the Registrar in writing. At least five days should be allowed for processing such requests.

Upon receipt of a written request to withhold directory information, the Office of the Registrar will place a hold on the student's record alerting staff in the Office of the Registrar the student has requested that no information be provided. No information will be released, regardless of any authorizations the student has completed either before or after notification has been submitted to the Office of the Registrar.

Cincinnati State has established formal academic partnerships with several four-year colleges and universities to facilitate transfer of Cincinnati State graduates to baccalaureate programs. Directory information plus addresses, telephone numbers, and e-mail addresses of Cincinnati State students, with 80+ credit hours earned and 2.000 minimum grade point average, will be provided periodically to Cincinnati State's academic partners.

Cincinnati State receives many inquiries for directory information from various sources, including prospective employers, insurance companies, loan agencies, other institutions of higher education, government agencies, and news media. All students are advised to carefully consider the consequences of a decision to withhold directory information. If a student requests to have directory information withheld, the student is required to provide written consent to the Office of the Registrar for any and all information to be released. Students requesting that directory information be withheld are not able to register through the web registration service.

Photographs and/or films of students for promotional and recruitment purposes are taken throughout the school year. Students who do not wish to be included in these visuals must inform the Director, Communications and Marketing prior to photographing and/or filming.

Notification of Rights under the Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. They are:

1. The right to inspect and review the student's education records within 45 days of the date that Cincinnati State Technical and Community College receives a request for access. Students should submit to the registrar, dean, program chair, or other appropriate official, a written request that identifies the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student's education records that the student believes are inaccurate or misleading. Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

   If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosure of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to schools officials with legitimate educational interests. A school official is:
   - A person employed by the College in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel)
   - A person or company with whom the College has contracted (such as an attorney, auditor, or collection agent)
   - A person serving on the Board of Trustees; or a student serving on an official committee, such as disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A College official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

4. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Cincinnati State Technical and Community College to comply with the requirements of FERPA. The name and address of the office that administers FERPA are: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue, SW, Washington, DC 20202-4605

Solomon Amendment

In compliance with the Solomon Amendment which became effective on April 1, 1997, Cincinnati State Technical and Community College must supply the following information (if captured) to representatives of any branch of Federal Armed Forces for the purpose of federal recruiting:

- Student name
- Address
- Telephone number
- Major
- Date and place of birth
- Level of education

- Degree(s) received
- Prior military experience
- Most recent previous education institution enrolled

Cincinnati State will only release this information without the student's written prior consent in compliance with the Solomon Amendment and upon written request of an official representative of the Federal Armed Forces. Please review the above section for information pertaining to the release of directory information.

Student Services

Services for Students

As a service to students and to the academic community, Cincinnati State Technical and Community College maintains a cadre of professional and support staff to help students make meaningful decisions regarding admission to college, registering for classes, applying for financial aid, career and educational decision making, personal and social counseling as well as the participation in a variety of student activities and sports.

ABLE/GED classes

The College hosts an adult literacy/GED program. Contact (513) 363-6100 for more information.

Advising

Academic advisors are available to assist all students in reaching their academic and career goals at Cincinnati State. Academic advisors, program chairs, and faculty are assigned to guide students through:

- Setting academic goals
- Selecting courses
- Making appropriate referrals (campus support services)
- Clarifying career and personal goals
- Developing educational plans
- Explaining academic policies and procedures
  - Addressing academic challenges
  - Providing information on transfer credits
  - Meeting requirements for graduation

Counseling

The Counseling Center maintains a professional staff to assist students. All sessions are confidential and free of charge to all Cincinnati State students.

The following services are provided by the counseling staff:

Individual Counseling - Counsel students regarding personal, social, or academic concerns, and crisis intervention.

Career Counseling - Help students with career decisions and concerns through individual counseling that may include career assessment, exploration of career information resources, career decision making processes, and assistance with choosing a college major.

Referral Assistance - Help students make connections with appropriate campus resources and external agencies.

Student Advocacy - Help students understand their rights and responsibilities and how to work through appropriate campus procedures.

The Counseling Center is located in Room 168 Main Building, (513) 569-1552. Office hours are 8 a.m. to 7 p.m. Monday and Wednesday, and 8 a.m. to 5 p.m. Tuesday, Thursday, and Friday.

Disability Services

The Office of Disability Services works with students to ensure they receive reasonable academic accommodations in courses of study. The major goal is to guarantee that all students with disabilities have an equal opportunity in the pursuit of their educational objectives. Services and programs are available for students according to individual need. Students who consistently use the resources and accommodation services earn higher grades and graduate at a higher rate than students who choose not to use them.

The College has renovated areas to make its facilities accessible to students with disabillities. Outdoor and indoor ramps, elevators, and specially designed restroom facilities are available to assist any physically-disabled person.

Students with disabillities who need accommodations must first register with the Office of Disability Services and present appropriate documentation. Additionally, students must present their class schedules to the counselor for special needs before the start of an academic term to determine appropriate accommodations. Services include counseling (personal, academic, transfer, career), test proctoring, note-taking, scribing, interpreting, assistive technology, conflict resolution, and providing audio texts and Braille access.

For further information regarding these services, contact the Office of Disability Services in Room 129 Main Building, (513) 569-1775.

GED Testing

The College provides GED testing for individuals who want to earn a high school equivalency credential. Call (513) 569-1894 for more information.

International Students

The International Student Office is responsible for developing programs to support and serve the international student community. It also provides admission advising and immigration regulation assistance. The international student advisor assists students with adapting to the campus environment and seeking internal and external referral resources. The office is located in Room 189 Main Building, (513) 569-1543.

Study Abroad

Education abroad is fast becoming a major part of a student's college experience. Cincinnati State has affiliation agreements with The University of Arizona Yangtze International Study Abroad program (YISA) and International Studies Abroad (ISA). Students are not limited to these affiliated programs and are free to participate in any other school/organization-sponsored programs. Inquiries about Study Abroad should be directed to the International Student Advisor in Room 184 Main Building, (513) 569-1543.

TRiO/Support Services for Students

Staff members in Student Support Services work with first-generation, low income, and/or disabled students who demonstrate an academic need. The goal of the program is to assist students in completing an associate's degree and transfer to a baccalaureate program. Tutoring, academic coaching, and other support services are provided.

Veterans

The Office of Veterans Affairs at Cincinnati State offers assistance to veterans, eligible dependents, and selected reservists who wish to initiate, continue, or resume using their VA educational benefits.

The office provides benefit counseling, filing claims to the Department of Veterans Affairs, admission advising, and referrals to other support services on campus and to various community agencies. The office also monitors student degree plans and graduation progress.

The State Approving Agency for Veterans Training has approved Cincinnati State for the education and training of veterans and all their dependents under all existing public laws. Inquiries concerning eligibility should be directed to the Coordinator of Veterans' Affairs in Room 184 Main Building, (513) 569-1543.

MyServices

MyServices is the pathway to web-based student services at Cincinnati State. Through MyServices, students can register, add and drop classes, view and print their class schedules, make payments, check on financial aid status, view and print their grade reports, and access a variety of other services. To access MyServices, go to the Cincinnati State website at www.cincinnatistate.edu, and then choose MyCState. Log in with username and password, then choose the MyServices tab.

Student Activities

The Office of Student Activities provides services and programming for all students to enhance and complement the overall academic experience. Student Activities provides an opportunity for students to participate in a diverse range of activities/events on and off campus from club/organization membership to social and educational events. The College encourages students to get involved in the planning and implementation of campus and social activities. Upcoming campus events are e-mailed to students and posted around campus. The Office of Student Activities is located in Room 204 ATLC.

SurgeCards

Every student enrolled in classes is required to have a College identification card (SurgeCard) with them at all times for security purposes. The initial SurgeCard is free and is available from Student Activities, in Room 204 ATLC, after a student has registered for classes.

The SurgeCard is required to use some campus services such as the library, parking, fitness center and to attend College sports activities. Additional uses for the SurgeCard include bookstore, computer lab printing, food services, vending machines, day care door access for qualified parents, and other services. A SurgeCard is required to access available financial aid fund information that can be used to purchase books in the campus bookstore. Financial Aid funds are never deposited on the SurgeCard. More information is available from Student Activities, Room 204 ATLC.

Student Government

All students are encouraged to attend Student Government meetings. The Student Government is involved in student activities and acts as a liaison between students and the administration. Additional information is available through the Office of Student Activities, Room 204 ATLC.

Athletics

Cincinnati State currently competes in the National Junior College Athletic Association (NJCAA) and the Ohio Community College Athletic Conference (OCCAC) in five sports: women's and men's basketball, women's and men's soccer, and golf. All five teams regularly compete under the rules and regulations of the National Junior College Athletic Association Region XII (Indiana, Michigan, and Ohio) and play a competitive junior college schedule.

Student Organizations

Students are encouraged to join the clubs and organizations that appeal to their academic and social interests. Student organization offices are located in the Office of Student Activities, Room 204 ATLC.

Current student organizations on campus are: Adult Learners on Campus, Amakita (Rainbow Alliance), American Culinary Federation Junior Chapter at MCI, American Society of Civil Engineers, Association of Medical Assisting Students, Beyond Borders, Black Student Union, Black Male Initiative, Business & Professional Women's Club, Cincinnati State First Robotics Team, Cincinnati State Gamers, Cincinnati State Student Ambassadors, Cincinnati State Toastmasters, Cincy4Christ, CinState Ad Club, Environmental Club, Firefighter Training Crew Club, International Student Association, Interpreter Training Club, Muslim Student Union of Cincinnati State, Nation of Islam Student Association, National Association of Home Builders (NAHB), Occupational Therapy Association, Ornamental Horticulture Club, Phi Theta Kappa, Production Club, Society of Women Engineers, Smash Crew, Spanish Club, Students in Free Enterprise, Student Senate, Surgical Technology Association, Unity Club, Veterans Association, and Women of Color.

New clubs/organizations may be chartered through the Student Senate. Additional information is available in the Office of Student Activities, Room 204 ATLC.

Facilities

Smoking Policy

Cincinnati State Technical and Community College is a smoke-free facility. No smoking is permitted in any College owned or operated building. Students, employees, and guests should extinguish smoking materials in receptacles provided at entrances to the building. The courtyard outside the College's main entrance, the small dock area near the courtyard, visitor's entrance, and the plaza in front of the Health Professions Building are also designated smoke-free. Smoking is not permitted within 25 feet of any building entrance.

All employees and students share in the responsibility for adhering to and enforcing this policy. Employees and students are expected to assist in the enforcement of this policy through refraining from smoking inside the building, and politely reminding persons who smoke inside the building to observe the College's policy.

Use of College Facilities

Students presenting a SurgeCard may use such facilities as the gymnasium, pool, game room, weight room, library, auditorium, meeting rooms, etc. Such use is restricted to hours set aside for student use for free time recreation. These hours will not conflict with previously scheduled events, and may be subject to change because of short term scheduling of intramurals, athletics, community use, etc.

Students or student groups may lease on-campus facilities through the Facilities Office. The use of facilities is outlined in the Facility Usage and Rental Guidelines.

Game Room

A Game Room is located in Room 135 ATLC. Table tennis, billiards, board games, and equipment are available free with a SurgeCard. Racquetball courts are also available for use by currently enrolled students. Racquets and balls can be checked out in the game room with a SurgeCard.

Gymnasium

The gymnasium is open only at designated times and a SurgeCard is required to check out equipment. No food or drink are allowed in the gym. Gym shoes must be worn when using the gymnasium (street shoes with soft soles are not permitted). It is also recommended that gym clothes be worn when using the gymnasium.

Pool

The pool is open to students and staff for free swimming at designated hours. A SurgeCard is required for pool usage and must be presented to the lifeguard. For the safety of all swimmers, no loud or disruptive behavior is tolerated. No street clothes are allowed in the pool area and locker rooms are available before and after swimming in the Fitness Center. Swimsuits are not allowed in other areas of the College.

Fitness Center

A SurgeCard is required for use of the Fitness Center and a liability waiver must be on file. All patrons must be currently enrolled students. Children, food, drinks, or loitering are not permitted in the Center. Personal fitness trainers are available. A towel is required while using the equipment. Hours of operation are posted each term.

Lockers

The College has lockers available for student use; however students must provide their own locks. Cincinnati State assumes no responsibility for any loss, theft, or damage to lockers, locks, or contents due to fire, trespassers, etc. Each year, at the end of the Spring Term, students must remove locks and contents from their lockers so that general cleaning and maintenance can be performed.

Johnnie Mae Berry Library

The Johnnie Mae Berry Library, named for the College's first librarian, provides library services to the College community. The library is open from 7:30 a.m. to 10 p.m. Monday through Thursday, 7:30 a.m. to 4:30 p.m. on Friday and 8 a.m. to 4 p.m. on Saturday. A trained, full-time staff member is available during these hours to assist library patrons in locating information and using the College's reference, circulation, and periodical collections. Along with standard print resources, the library has a wide array of resources available electronically.

The library's homepage is available online at www.cincinnatistate.edu/library or by clicking on the word "Library" from the College's homepage. It provides access to BLINK, the library's online catalog, and numerous links to a wide variety of sites which support the College's curriculum.

Students may check out circulating books for a three-week period or audio books for a two-week period by presenting their SurgeCard. Books may be renewed up to four times provided no one has placed a hold on the item. Audiobooks may be renewed once. If items are not returned within three weeks of receiving of an overdue notice, students receive a bill of at least $100 per item to cover the replacement and processing costs. Upon return the charge is reduced to $25 per item.

Cincinnati State is a member of the Ohio Library Information Network also known as OhioLINK. This network provides access to a central catalog of the colleges and universities throughout Cincinnati and Ohio. Students can request books from any other OhioLINK libraries through this system. Items are usually delivered within three days and are checked out for three weeks and renewed up to four times. Overdue fines of 50 cents per day are charged for books borrowed from other libraries. A fee of $50 per item is charged for books overdue more than 28 days.

Cincinnati State students also have access to a number of libraries in the area through the SWON Libraries (Southwest Ohio and Neighboring Libraries). To use the member libraries, students must obtain a SWON Common Patron ID card at the Circulation Desk in the Berry Library. These IDs expire at the end of each academic term and must be renewed every term. SWON's website, www.swonlibraries.org, provides access to a member directory and lending policies.

The library's media collection provides a variety of instructional videotapes, DVD's, slides, laser discs, etc., which are available for students to view in the library during the library hours. A limited portion of these items may be checked out for one week.

Laptops are available for students to check out for two hours for use in the library. A SurgeCard is required for checkout. The laptops contain the software found in the computer labs and connect to the Internet via a wireless network. A $10 per hour fine is charged for laptops not returned on time.

The library has two group study rooms, and a variety of tables, desks, and carrels for individual study. Two coin-operated copiers are available for making copies for 10 cents per page.

William L. Mallory Child Development Center

The William L. Mallory Child Development Center is located on the Fourth Floor of the Main Building. It offers a comprehensive program of child care for infants of six months and older through prekindergarten. Students interested in placing children in the program should contact the director.

Cincinnati State Bookstore

The bookstore is located on the lower level of the ATLC. A complete supply of new texts and a limited supply of used books are available, covering all the courses offered at the College. The store also carries a complete line of classroom supplies, calculators, and course-related equipment and supplies.

Used books are purchased by the bookstore at any time during the year.

Books for which an exchange or refund is requested must be accompanied by the original receipt and presented to the College bookstore within one week after the beginning day of each term. If a student drops a course and wishes a refund within the established time frame, the student must show bookstore personnel a copy of the drop/add form. Only books on approved technology book lists can be returned as used books and refunded accordingly.

Regular hours of the bookstore are Monday, 8 a.m. to 7 p.m., Tuesday through Thursday, 8 a.m. to 6 p.m., and Friday 8 a.m. to 2 p.m. During registration periods, hours are extended.

Dining and Vending Services

The Overlook Cafe offers a wide selection of wholesome foods and refreshments.

Hours of operation are 7:30 a.m. to 6 p.m. Monday through Thursday and 7:30 a.m. to 2:15 p.m. on Friday.

Vending facilities are open 6:30 a.m. to 10 p.m. daily in the first floor cafeteria area ATLC, the third floor student lounge Main Building, and on the second and third floor of the Health Professions Building. If necessary, refunds from vending facilities can be obtained from the cafeteria cashier.

Parking & Traffic Regulations

The regulations set forth in this section were developed by the Campus Police Department, and approved by the College Administration in accordance with the Ohio Revised Code.

The goal is to utilize the available parking resources for the benefit of students, faculty, and visitors to insure that the parking areas are maintained and safe.

Parking Facilities

Students:
The College offers student parking in Lot C (on the corner of Ludlow Avenue and Central Parkway) Lot G (on Central Parkway across from College Drive), the Central Parkway Garage and the Ludlow Garage.

The Cincinnati State SurgeCard provides access to parking. Students are able to purchase a term parking privilege, valid for the entire term, online through MyCState. The parking privilege is placed on the student's SurgeCard. Students "swipe" the SurgeCard at the card-reader - either on entry to Ludlow garage, or while exiting the Central Parkway garage. Parking privileges are sold on a per-term basis. Students must purchase a new privilege before the start of every new term. Students may also pay for parking on a per-use basis.

Faculty/Staff:
The College offers faculty and staff parking in Lot A (off of College Drive), Lot D (located at the end of A wing), and in spots along the front and rear of the main building. Additionally, faculty and staff may park in the parking garages or in Lot C. A College-issued parking permit is required to park in these areas.

Motorcycle Parking:
There is motorcycle parking provided at the end of A wing near Lot D.

Daily Parkers (Cash Customers):
Students or campus visitors who wish to pay for parking on a daily basis have several options:

Lot C: Students may pay $2 at the booth located in Lot C. Lot C will also serve any overflow from garages or Lot G.

The Central Parkway Garage and Lot C: These facilities are

equipped with "Auto-Cashiers." These devices are similar to vending machines, and upon exit, the student may insert $2 (Lot C) or $5 (Central Parkway Garage) in either change or bill form, and vend the gate. Additionally, students may use the debit-feature on their SurgeCard and pay for parking at the card-reader located at the gate.

Lot G: Students who have not purchased a term parking privilege, as outlined above, have the option of parking in Lot G. Students without the term parking privilege may utilize the debit feature of their SurgeCard to pay $1 for parking at the card-reader located at the gate.

Important Notes

- Students utilize SurgeCards (or pay for parking) upon exit, except for Ludlow Garage which is SurgeCard entry.
- The debit function of the SurgeCard will not work at the parking exit gates. Students wishing to pay for parking on a per-use basis must use cash.
- Students should recognize that their student SurgeCard is valid only for student parking areas and will not allow them access to any faculty/staff parking area. Additionally, student parking is not permitted in any parking spot located at the front of school, along College Drive.

Questions about parking should be directed to the Campus Police Department at (513) 569-1558.

Handicapped Parking

Parking permits are available allowing use of the handicapped parking spaces. Both a state-issued license plate/plaque and a Cincinnati State parking permit are required. Contact the Campus Police Department for details, Room 7 Main Building, (513) 569-1558.

Visitor Parking

Visitor parking is available in the Central Parkway Garage for $5 or in Lot C for $2. These lots can be used by students registering or visiting campus. Parking vouchers are available at Campus Police Department. The parking voucher must be presented for free parking.

Emergencies

Individuals who see a crime on campus or need assistance from Campus Police should call (513) 861-8888.

Emergency phones are located near the parking areas and in the garages. These phones are monitored by the Campus Police Department 24 hours a day.

The Campus Police is available to assist students and staff who accidentally lock their keys in the car or need a jump start. Contact the Campus Police Department in Room 7 Main Building or call (513) 861-8888 for assistance.

Citation Procedure

College parking regulations are enforced by the Campus Police Department. Any violations can result in a citation. Citations must be paid or appealed within 10 business days from the date of issue. After that time, the ability to appeal is lost.

Any citation not paid or appealed within 10 business days of issue will double in cost, and the vehicle is subject to impoundment. After 30 days from issue, unpaid citations are automatically added to the student's account. Repeated or serious violations could result in loss of campus parking privileges, towing of vehicle and/or impoundment at the owner's expense. Ignorance of College parking policy is not an excuse for operating or parking in violation. Citations are payable at the Cashier's Office or mail to: Cincinnati State Technical and Community College, Cashier's Office, 3520 Central Parkway, Cincinnati, OH 45223.

The purchase and display of a parking permit does not guarantee the availability of a parking space and does not justify parking against College policy.

Parking Violations

A list of violations is available in the Campus Police Department, Room 7 Main Building.

Citation Appeal Procedure

Any ticket issued by Campus Police can be appealed by filling out the appeal form available in the Campus Police Department, Room 7 Main Building. The form must be completed and submitted within ten business days after the ticket was issued. The findings of the Appeal Committee are final.

Liability

Cincinnati State Technical and Community College assumes no responsibility for theft or damage to vehicles parked on College property.

The Campus Police Department is here to help with any questions. Students are invited to visit or call (513) 569-1558.

Academic Divisions, Degree & Certificate Programs

Academic Divisions & Programs of Study

Cincinnati State Technical and Community College has four academic divisions which offer credit courses: Business Technologies, Center for Innovative Technologies, Health and Public Safety, and Humanities and Sciences.

The College offers a variety of educational programs that lead to associate's degrees. Full-time students can complete these programs in two years or less; however, many students take longer to complete their degree requirements.

Technical associate's degree programs are intended to prepare students for employment immediately after graduation, although the credits earned in these programs also are transferable to four-year colleges and universities.

The technical associate's degrees awarded are Associate of Applied Business (AAB), Associate of Applied Science (AAS), Associate of Technical Study (ATS), and Associate of Individualized Study (AIS). In this catalog, the AAB and AAS degree programs are listed according to the academic division that offers the program. The ATS programs are listed on pages 76 and 135.

University-parallel associate's degree programs are intended to prepare students for immediate transfer to a four-year college or university, by providing the courses required for the first two years of a bachelor's degree. Students who complete these degrees are given preferential consideration for admission to a public university in Ohio.

The university-parallel degrees awarded are Associate of Arts (AA) and Associate of Science (AS). These associate's degree programs are listed beginning on page 72.

In addition to associate's degree programs, the College offers certificate programs that prepare students for specific occupational situations. These certificate programs can usually be completed in less time than is required to complete an associate's degree.

The College also offers courses and services to assist students who may need additional preparation or support in order to be successful in achieving their academic goals.

College-Wide Graduation Requirements

As part of the graduation requirements for the Associate of Applied Business (AAB), Associate of Applied Science (AAS), Associate of Individualized Study (AIS), and Associate of Technical Study (ATS) degrees, students must complete at least 21 credit hours in general education areas, distributed as follows:

- Communication Skills – 12 credits
  9 credits written communication (department code ENG)
  3 credits oral communication (department code COMM)
  COMM 1020 Public Speaking
  COMM 1021 Advanced Public Speaking
  COMM 1023 Interpersonal Communication
  COMM 1024 Group Dynamics & Program Solving
  COMM 1025 Small Group Communication
- Social Sciences and Humanities – 9 credits
  Selected from these areas:
  Social/Behavioral Sciences, including:
  economics (department code ECO)
  geography (department code GEO)
  history (department code HST)
  labor relations (department code LBR)
  political science (department code POL)
  psychology (department code PSY)
  sociology (department code SOC)
  Arts/Humanities, including:
  art (department code ART)
  communication (department code COMM) COMM 1031, 1032, 1033, 1040, 1044, 1045, 1050
  culture studies (department code CULT)
  foreign languages (department codes FRN, ITP, SPN)
  literature (department code LIT)
  music (department code MUS)
  philosophy (department code PHI)
  theatre (department code THE)

Students seeking an AAB, AAS, AIS, or ATS degree should consult the curriculum for their program, published elsewhere in this catalog, to determine how the general education requirements should be met. Individual degree programs may require students to complete program-specified general education courses, or may permit them to choose some general education elective courses. Transfer credit for social science or humanities courses completed at another institution, in disciplines not listed above, may be applied toward Cincinnati State graduation requirements with the program chair's permission.

Students seeking the Associate of Arts or Associate of Science degree must meet the general education requirements described on page 72.

Program Graduation Requirements (Degree Audit Curriculum)

Requirements for each degree and certificate program at Cincinnati State are published each year in this catalog. Students are expected to fulfill the requirements in effect for the catalog year they are admitted to the program. This set of requirements may be referred to as the student's Academic Evaluation or Degree Audit curriculum.

Students readmitted to the College after an absence of one year or more are expected to fulfill the requirements in effect at the time of readmission.

Students should consult with their program chair or academic advisor to discuss any changes made to program requirements that could affect progress toward completing their degree or certificate program.

College Orientation Requirement

All Cincinnati State students who enroll in a degree program are required to complete a college orientation course, either FYE 9001, College Survival Skills, FYE 9002, College Success Strategies, or FYE 9003, The Community College Experience.

Students in the Cincinnati State Honors Experience fulfill the orientation course requirement by completing HNR 1695, Introduction to Honors.

Some certificate programs also require students to complete FYE 9001, FYE 9002, or FYE 9003. Each certificate program that requires completion of an orientation course is indicated in the Academic Divisions section of this catalog.

From Early Fall 2001 through Summer 2006, the required orientation course was titled CAR 9002, College Success Seminar. Students who enrolled in a degree or certificate program that required CAR 9002 and did not complete it are required to complete either FYE 9001, FYE 9002, or FYE 9003. Students must complete the orientation course requirement within the first 18 credit hours taken at Cincinnati State.

Degree-seeking or certificate-seeking students who have already successfully completed 18 or more credits of college-level courses at another college or university and has received Cincinnati State transfer credit for these courses are not required to complete an orientation course.

The orientation courses FYE 9001, FYE 9002, and FYE 9003 introduce students to the college experience and to Cincinnati State's expectations and resources for new students. The orientation course earns college credit, but it does not fulfill general studies or core course requirements for degree or certificate programs.

The Honors Experience

The Cincinnati State Honors Experience supports the institutional goal of serving all aspects of the community by offering enhanced learning opportunities to academically talented, highly motivated students. The Honors Experience curriculum complements existing degree programs; students can take Honors sections of many required courses. The Honors Experience strives to establish an intellectual community among students and faculty by providing challenging coursework, academic enrichment activities, academic honors advising, and opportunities for student involvement. Honors Experience graduates receive recognition at commencement and on their diploma and transcripts.

The Honors Experience is open to full-time and part-time admitted degree-seeking students in all divisions of the College who meet the entry criteria listed below. Students are first admitted to a degree program and then to the Honors Experience. All Honors Experience students must take HRN 1695, Orientation to Honors, as a co/prerequisite to other Honors classes.

Students accepted into the Honors Experience who enter Cincinnati State directly from an area high school are eligible to apply for an Honors Experience scholarship.

For more information, contact Marcha L. Hunley, Honors Chair, (513) 569-1732, or visit www.cincinnatistate.edu/honorsexperience

The entry criteria for the Honors Experience include:

A. New student - (meet at least one of the following):
   - High school GPA of 3.25 or higher
   - High school rank in top 20%
   - ACT 26 (after April 1996)
   - SAT scores 1140 (after April 1996)
   - COMPASS® scores of 85 for Reading, 80 for Writing, and Math at program level.

B. Current student: college GPA of 3.25 after 18 academic credits
C. Transfer student: college GPA of 3.25 after 18 academic credits

All students applying for the Honors Experience must submit two recommendations from persons familiar with their academic potential and performance in a teaching/learning environment.

Developmental Education

Developmental education courses are available for students whose placement test scores indicate a need for additional preparation in the areas of reading, writing, and math skills before entering their program of study. Typically, students take these courses prior to admission to a degree program. However, in some cases, developmental courses can be taken in conjunction with program-level coursework. Students who need developmental courses are assigned a pre-technical or pre-major advisor. The advisor assists students in selecting appropriate coursework and monitors the progress of each student toward meeting program admission requirements.

Courses in study skills are also available. These courses provide students with important college success skills such as taking tests, managing time, using the library, and taking notes. In addition, a computer learning laboratory and tutoring services are provided free of charge when extra help is needed.

Courses with a DE or ESL department code are counted in the total number of attempted hours on student transcripts, but they are not used to calculate a student's grade point average (GPA). Even though these grades do not affect the GPA, they can affect financial aid eligibility. Grades earned in courses with a CAR department code do count toward the student's GPA. DE courses cannot be counted toward graduation.

The following courses are offered every term:

		Credits
DE 0003	Basic Writing 1	4
DE 0004	Basic Writing 2	4
DE 0005	Basic Writing 3	4
DE 0010	College Reading 1	4
DE 0011	College Reading 2	4
DE 0020	Basic Mathematics 1	4
DE 0024	Basic Algebra 1	4
DE 0025	Basic Algebra 2	4
CAR 9014	College Study Skills	4
ESL 0060	Reading and Writing 1	4
ESL 0061	Reading and Writing 2	4
ESL 0063	Conversation	2
ESL 0064	Advanced Writing	4

Students may be advised to take other developmental courses not listed above that are offered on varying schedules to meet specific program preparation needs.

ESL Courses

International students who successfully complete courses in English as a Second Language (ESL) are considered to have completed developmental writing and reading courses. Additional developmental writing and reading courses are not required.

Learning Lab

The Learning Lab is located in Rooms 254 and 258 Main Building. This computer laboratory provides students the opportunity to use supplemental instructional materials to sharpen their basic skills while reinforcing their ability to learn independently.

Tutoring

Individual or group tutoring is available to Cincinnati State students in a variety of subject areas and is free of charge. Instruction is provided by qualified faculty or by student tutors who are recommended by faculty. All tutors receive training in methods, policies, and practices aimed at promoting independent learning. Students may request a tutor through the Tutoring Center in Room 261 Main Building. Drop-in tutoring and tutoring by appointment are available for students who need assistance.

Distance Learning at Cincinnati State

Distance learning courses at Cincinnati State offer students a choice in how they complete their coursework. Students may choose to take a class totally online and at a distance with no on-campus meetings or choose to take a class where most of the educational activities occur online, at a distance with some required on-campus meetings. Either choice gives students the flexibility to fit classes into their busy lifestyle. For more complete definitions of distance learning classes, review the distance learning definitions' section below.

Successful online students exhibit high levels of self-discipline, good time management skills, and dedication. Distance learning classes also require students to be comfortable using basic features and functions of a computer such as email, downloading software, successfully attaching and sending documents, resolving simple technology issues, using a word processing software, and more. For more information about distance learning, visit, www.cincinnatistate.edu/distancelearning.

Distance Learning Definitions

Online/web-based (virtual): Courses that contain all online activities, with no scheduled campus meetings. However, in some online classes students may be required to take tests on campus,

or at a specially-arranged proctored location. These classes are identified in the registration process with the code WEB.

Hybrid: Courses that contain more than 70% online activities and require regularly-scheduled on-campus meetings, which could include (for example) labs or speeches. Testing may occur online, on campus, or at specially-arranged proctored sites. These classes are identified in the registration process with the code HYB.

Web-enhanced: Courses that are delivered primarily on-campus with required in-person attendance, but with assignments, activities, discussions, and/or testing available online. These courses are not considered distance learning courses.

Taking Exams:

In some distance learning courses students may be allowed to take exams and quizzes online. However, some distance learning courses may require students to come to campus for testing, or find a qualified proctor or testing center. External proctors must sign an agreement with the College in order to proctor an exam.

Student Support Services for Distance Learning

Library: The electronic resources available through the Johnnie Mae Berry Library and OhioLINK are licensed resources available to students on campus, and students completing their coursework online, at a distance.

Students wishing to use the library and its resources, including the electronic resources, must have a SurgeCard, Cincinnati State's identification card. The SurgeCard also allows students to borrow books from college and university libraries that are part of the OhioLINK system. Students can obtain a SurgeCard from the Office of Student Activities, Room 204 ATLC. Distance students who cannot come to campus may contact Student Activities at (513) 569-5747 for additional information.

Bookstore: Cincinnati State's bookstore, Follett, provides online access to order books, supplies, and materials. Students may order textbooks and merchandise from the bookstore's website, www.cincinnatistate.edu/on-campus/bookstore. Distance students may have materials shipped to them, or may pick up materials on campus.

Many Cincinnati State instructors use customized versions of textbooks which are not available at other online retailers. Cincinnati State's bookstore is the only place to obtain these materials.

Technical Help Desk: The College Help Desk can assist distance students with technical problems related to their distance learning courses. Students may call the Help Desk at (513) 569-1234, extension 1, Monday through Thursday from 7 a.m. - 11 p.m., Friday from 7 a.m. - 7 p.m., and Saturday from 7 a.m. - 2:30 p.m.

Academic Advising: At Cincinnati State, students are assigned an academic advisor based on their program choice. Advisors for distance students are the same as those advising students who complete non-distance classes. Students should touch base frequently with their advisor—in person, by email, or via phone—to ensure success in achieving academic goals. Students may contact their academic advisor by calling (513) 569-1552 or through their division office.

Registration: Registration for all Cincinnati State courses is available online. There is no difference in cost for distance courses. For available courses, log into https://mycstate.cincinnatistate.edu/.

Distance learning courses are noted in registration information with the codes WEB (online course) or HYB (hybrid course). Distance students are encouraged to view the comments section for each hybrid course for information about required on-campus meetings.

Distance Learning Myths and Facts

Myth: Distance learning courses are easier than regular campus-based courses.
Fact: Distance learning courses have the same rigor and content as campus-based courses, and require a greater time investment for the student.

Myth: Distance learning requires high-level technical skills.
Fact: To succeed in distance courses, students need to be comfortable using computer hardware and software, but most distance courses do not require the student to have high-level technical skills.

Myth: Taking a distance course means never having to be on campus for class activities.
Fact: Some distance courses have on-campus or other activities, or may require on-campus testing. Each course is different, so it is a good idea to check with the instructor first.

Myth: Distance course instructors are available 24/7.
Fact: Just like campus-based classes, the instructors are not available 24/7. However, instructors usually answer their email within 48 hours. The College Help Desk is available to assist with technical problems throughout the week and on Saturday.

Myth: Distance learning courses are self-paced and a student can complete their work whenever they want.
Fact: Most distance courses have a defined structure and deadlines, just like a campus-based course. Distance learning is not a good choice for procrastinators. However, students who are are self-directed and have good time management skills to complete course requirements on time will probably be successful in distance learning courses.

Myth: Distance learning courses do not require students to work in groups, communicate, or interact with other students.
Fact: Some distance courses require more collaboration in the form of chat rooms, discussion boards, group projects, blogs, or wikis. Specific group activities will vary, depending on the instructor's goals for the course.

Myth: Students have less interaction with faculty in distance learning courses.
Fact: It can be more difficult to establish connections with instructor's in a distance learning course. However, most faculty have developed concrete ways to interact with the students in their distance courses. Research has shown that interaction depends on efforts made by students as well as instructors.

Myth: The quality of teaching and learning is lower in distance learning courses.
Fact: Research has shown there is no significant difference in learning in a distance course. In fact, some recent research has shown that for some distance courses, learning may be retained longer than for the same campus-based course. Learning depends on the student's willingness to commit time and energy to their courses.

Myth: Other colleges don't accept distance learning credits.
Fact: The Cincinnati State transcript does not identify distance courses verses campus-based courses. Distance learning courses are equivalent to campus-based courses in credit hours, ability to fulfill degree requirements, and transferability to other institutions.

Myth: All distance learning courses are the same.
Fact: Each distance course is customized by the individual faculty member. While the website navigation and menus are similar for most distance courses, each instructor will use different options to deliver their course content. It is critical for students to pay attention to the syllabus and other instructions for each distance course.

Programs and Courses

The following certificate program(s) are available totally online, at a distance, with no required on campus meetings:

Business Division
Paralegal Certificate
Accounting Certificate

Center for Innovative Technologies
Advanced Surveying Certificates

Health and Public Safety
Coding Specialist Certificate

At the time of catalog publication, the following classes are offered either in a totally online format (WEB) or as a hybrid (HYB). Additional courses may be added throughout the year.

Course Number	Course Title
ACC-1851	AUDITING
ACC-2914	COST ACCOUNTING 1
ACC-2915	COST ACCOUNTING 2
ACC-2917	FEDERAL TAXATION 1
ACC-2918	FEDERAL TAXATION 2
ACC-2919	INTERMEDIATE ACCOUNTING 1
ACC-2921	MANAGERIAL ACCOUNTING
ACC-2922	COMPUTERIZED ACCOUNTING APPLICATIONS
ACC-2926	FINANCIAL ACCOUNTING 1
ACC-2927	FINANCIAL ACCOUNTING 2
ACC-2946	COMPUTERIZED INCOME TAX PREPARATION
ACC-2947	COMPUTERIZED BOOKKEEPING 1
ACC-2948	COMPUTERIZED BOOKKEEPING 2
ART-1660	INTRODUCTION TO ART
ASM-2599	TRUCK TRANSPORT
BIO-4009	GENERAL MICROBIOLOGY
BIO-4014	ANATOMY AND PHYSIOLOGY 1
BIO-4015	ANATOMY AND PHYSIOLOGY 2
BIO-4016	ANATOMY AND PHYSIOLOGY 3
BIO-4018	PHARMACOLOGY
BIO-4020	FUNDAMENTALS OF PATHOPHYSIOLOGY
BIO-4071	CONCEPTS OF BIOLOGY 1
BIO-4073	CONCEPTS OF BIOLOGY 3
BIO-4074	HUMAN DISEASE
BIO-4076	HUMAN GENETICS
BMT-7739	INTRODUCTION TO BIOMED INFORMATION SYSTEMS
BMT-7749	BIOMEDICAL INSTRUMENTATION 1
BMT-7759	BIOMEDICAL INSTRUMENTATION 2
BUS-1999	SPECIAL PROBLEMS SEMINAR
BUS-2925	BUSINESS PRINCIPLES
BUS-2973	BUSINESS ETHICS
BUS-9231	CO-OP SEMINAR 2
BUS-9232	CO-OP SEMINAR 3
BUS-9233	BUSINESS COMPETENCIES
CET-7927	CAD 1 (CET)
CET-7934	STATICS (CET)
CET-7941	COMPUTER INTEGRATED CONST
CET-7951	SURVEYING HISTORY
CET-7956	STRUCTURAL STEEL DESIGN
CET-7981	GIS 2
CET-7982	GPS FOR SURVEYING
CET-7990	ADVANCED SURVEY CALCULATIONS
CET-7992	ELEMENTS OF LAND SURVEYING 3
CET-7993	SURVEYING LAWS AND ETHICS
CET-7994	STATISTICS FOR SURVEYING
CHE-2231	FUNDAMENTALS OF GENERAL CHEMISTRY
COMM-1023	INTERPERSONAL COMMUNICATION
CRJ-1253	CRIMINAL COURTS & PROCEDURES 1
CUL-2899	CULINARY SCIENCE
CULT-1648	SOCIAL ISSUES IN TECHNOLOGY
DE-0005	BASIC WRITING 3
DE-0024	BASIC ALGEBRA 1
DT-1202	NUTRITION FOR HEALTHY LIFE
DT-1204	NUTRITION FOR THE LIFE CYCLE
ECE-4358	CLASSROOM MANAGEMENT FOR ECE
ECE-4360	PRINCIPLES OF EARLY CHILDHOOD EDUCATION
ECE-4364	PRACTICUM 2 - PRESCHOOL
ECE-4365	CHILDHOOD 3 - SCHOOL AGE
ECE-4366	PRACTICUM 3 - SCHOOL AGE
ECE-4369	PARENTS AND FAMILIES IN ECE
ECE-4370	NUTRITION AND HEALTH FOR ECE
ECE-4374	LANGUAGE DEVELOPMENT
ECE-4375	DIVERSITY FOR ECE
ECE-4376	EXCEPTIONAL CHILDREN
ECO-1512	MICROECONOMICS
ECO-1513	MACROECONOMICS
EET-7710	DC CIRCUIT ANALYSIS
EET-7716	COMPUTER CALC FOR ELECTRONICS
EET-7748	MICROPROCESSOR SYSTEMS 1
EMTR-7791	ELECTRONIC DEVICES EMTRC
EMTR-7792	ENERGY EFFICIENCY AND AUDITS
EMTR-7794	PHOTOVOLTAIC AND WIND DEVICES
EMTR-7795	SOLAR AND GEOTHERMAL SYSTEMS
END-4200	INTRODUCTION TO END
END-4201	INTRODUCTION TO NEUROSCIENCE
END-4210	EEG INSTR & RECORDING
END-4220	EEG LAB MANAGEMENT
END-4221	EEG CORRELATIONS
END-4222	EEG DIR CLINICAL PRACTICE
ENG-1001	ENGLISH COMPOSITION 1
ENG-1002	ENGLISH COMPOSITION 2
ENG-1003	ENGLISH COMPOSITION 3
ENG-1009	BUSINESS ENGLISH
ENG-1010	TECHNICAL WRITING 1
ET-9300	TECHNOLOGY CAREER PREPARATION
EVET-7670	REGULATIONS & PERMITS
EVET-7680	ENVIRONMENTAL REGULATIONS FST
FIN-2961	PERSONAL FINANCE
FIN-2976	FINANCIAL INSTITUTIONS
FST-4747	FIRE BEHAVIOR & COMBUSTION
FST-4748	PRINCIPLES OF EMERGENCY SERVICES
FST-4750	FIRE EXTINGUISHER TRAINING
FYE-9001	COLLEGE SURVIVAL SKILLS
HFT-4098	SPECIAL TRAIN-CHRONIC DISEASES
HFT-4163	FOUND OF HEALTH AND FITNESS
HFT-4818	SURVEY ALTERNATIVE MEDICINE
HIM-4400	INTRO TO HEALTH INFORMATION MANAGEMENT
HIM-4401	HEALTH CARE INFORMATION TECHNOLOGY SYSTEMS
HIM-4407	HEALTH RECORD CONTENT & FORMAT
HIM-4410	BASIC CPT CODING
HIM-4411	CLINICAL ABSTRACTING
HIM-4415	LEGAL ASPECTS OF HEALTH INFORMATION
HIM-4417	HEALTH DATA ANALYSIS
HIM-4419	HIM TECHN SYSTEMS SKILLS LAB
HIM-4420	BASIC ICD-9-CM CODING
HIM-4421	INTERMEDIATE ICD-9-CM CODING
HIM-4422	CLINICAL CLASSIFICATION SYSTEM
HIM-4431	HEALTH INFORMATION DEPARTMENT MANAGEMENT
HIM-4432	ALT HEALTH RECORD SYSTEMS
HIM-4449	MEDICAL BILLING PROCEDURES
HIM-4450	REIMBURSEMENT METHODOLOGIES
HIM-4451	INTERMEDIATE CPT CODING
HIM-4453	QUALITY ASSESSMENT IN HIM
HIM-4492	HIM CURRENT TOPICS
HNR-1696	DISNEYFICATION OF AMERICA
HRM-3631	FOOD SERVICE SANITATION
HRM-3636	HOSPITALITY SALES & MARKETING
HST-1568	AMERICAN HISTORY TO 1860
HST-1569	AMERICAN HISTORY 1860-1914
HST-1570	AMERICAN HISTORY AFTER 1914
IDT-7880	ADVANCED MODEL MAKING/PROTOTYPING
IT-5121	LAN ADMINISTRATION: WINDOWS 1
IT-5122	LAN ADMINISTRATION: WINDOWS 2
IT-5125	LAN ADMINISTRATION: MESSAGING
IT-5131	NETWORK MANAGEMENT/HELP DESK

IT-5153 NETWORK COMMUNICATIONS 3
IT-5154 NETWORK SECURITY & LEGAL ISSUES 1
IT-5155 NETWORK SECURITY/LEGAL ISSUES 2
IT-5201 INFORMATION TECH CONCEPTS
IT-5207 SYSTEMS ANALYSIS AND DESIGN 1
IT-5247 SYSTEMS ANALYSIS DESIGN 2
IT-5255 INTERNET PROGRAMMING: HTML
IT-5271 JAVA 1
IT-5274 JAVA 4
IT-5276 C++ PROGRAMMING 2
IT-5283 ASP.NET PROGRAMMING WITH C#
IT-5284 ASP.NET PROGRAMMING 2
IT-5291 VISUAL BASIC 1
IT-5292 VISUAL BASIC 2
IT-5293 VISUAL BASIC 3
IT-5294 VISUAL BASIC 4
IT-5295 VISUAL BASIC 5
IT-5320 DATABASE DESIGN AND SQL
IT-5321 DB PROG & ADMINISTRATION: SQL SERVER 1
IT-5322 DB PROG & ADMINISTRATION: SQL SERVER 2
IT-5325 DATABASE ADMINISTRATION 1
IT-5329 DATA REPORTING: CRYSTAL RPTS
IT-5331 INTERNET PROGRAMMING: ASP
IT-5332 INTERNET PROGRAMMING: JAVASCRIPT
IT-5333 INTERNET PROGRAMMING: XML
IT-5334 PHP AND MYSQL
IT-5361 CPDM DESIGN PROJECT 1
IT-5362 CPDM DESIGN PROJECT 2
IT-5363 CPDM DESIGN PROJECT 3
IT-5449 GRAPHIC DESIGN PORTFOLIO REV
IT-5453 WEB DEVELOPMENT 1
IT-9350 INTRODUCTION TO SOFTWARE DEV CAREERS
LAW-1823 BUSINESS LAW 1
LAW-1824 BUSINESS LAW 2
LAW-1825 HOSPITALITY LAW
LAW-1828 FAMILY LAW
LAW-1829 LITIGATION 1
LAW-1830 LEGAL RESEARCH 1
LAW-1831 LEGAL RESEARCH 2
LAW-1832 LITIGATION 2
LAW-1838 LEGAL ETHICS
LBR-1535 INTRODUCTION LABOR/MANAGEMENT RELATIONS
LIT-1051 DRAMA
MA-4203 CLINICAL PROCEDURES 2
MA-4205 MEDICAL LAB PROCEDURES 2
MA-4221 MEDICAL ADMIN PROCEDURES
MA-4298 CODING & REIMBURSEMENT
MCH-4001 INTRODUCTION TO HEALTH CARE SYSTEM
MCH-4002 INFORMATICS IN HEALTH CARE
MCH-4806 MEDICAL TERMINOLOGY 1
MCH-4807 MEDICAL TERMINOLOGY 2
MCH-4808 PROFESSIONALISM IN HEALTH CARE
MCH-4815 ACCELERATED MEDICAL TERMINOLOGY
MCH-4816 HEALTH AND WELLNESS PROMOTION
MCH-4840 ORIENTATION TO THE HEALTH RECORD
MCH-4841 UNIT COORDINATOR PROCEDURES 1
MCH-4842 UNIT COORDINATOR PROCEDURES 2
MCH-4870 BASIC ELECTROCARDIOGRAPHY
MCH-4871 ADVANCED ARRHYTHMIA RECOGNITION
MCH-4882 LAW AND ETHICS FOR HEALTH CARE
MCH-4884 CULTURAL COMPETENCY FOR HPS
MCH-4886 QUALITY ISSUES IN HEALTHCARE
MCH-4898 HOME HEALTH AIDE
MGT-2965 PRINCIPLES MANAGEMENT 1
MGT-2966 PRINCIPLES MANAGEMENT 2
MGT-2967 INTRODUCTION TO MANAGEMENT
MGT-2989 CUSTOMER SERVICE SYSTEMS
MKT-2901 PRINCIPLES OF MARKETING 1
MKT-2902 PRINCIPLES OF MARKETING 2
MUS-1665 MUSIC: MIDDLE AGES TO 19TH CENTURY
MUS-1668 SURVEY AFRICAN AMERICAN MUSIC
NUR-4901 ACADEMIC STRATEGIES NURSING STUDENTS
NUR-4927 ROLE TRANSITION IN NURSING 2
NUR-4928 GERONTOLOGICAL NURSING
NUR-4993 CARDIOVASCULAR NURSING
OT-1850 INTRODUCTION TO COMPUTER APPLICATIONS
OT-1863 ELECTRONIC SPREADSHEETS (EXCEL)
OT-1864 ADVANCED ELECTRONIC SPREADSHEET (EXCEL)
OT-3003 DOCUMENT FORMATTING 2
OT-3005 MEDICAL FORMATTING & TRANSCRIPTION
OT-3007 INTRODUCTION TO KEYBOARDING
OT-3016 INTRODUCTION TO LEGAL ENVIRONMENT
OT3017 LEGAL FORMATTING
OT-3018 LEGAL TRANSCRIPTION
OT-3036 PROJECT MANAGEMENT APPLICATION
OT-3058 MICROSOFT WORD/WINDOWS
OT-3064 INTRODUCTION TO POWERPOINT
OT-3068 DATABASE MANAGEMENT: ACCESS 1
OT-3069 ADVANCED MICROSOFT WORD
OT-3070 ADMINISTRATIVE OFFICE MANAGEMENT 1
OT-3092 DESKTOP PUBLISHING MICROSOFT PUB & FRONT PG
OT-3095 INTRODUCTION TO COMPUTERS-INTERNET
OTA-4600 INTRODUCTION TO OCCUPATIONAL THERAPY
PAS-2850 BAKING THEORY 1
PAS-2851 BAKING THEORY 2
PAS-2853 PASTRY THEORY
PCC-3670 PERSONAL CHEF PRINCIPLES
PHI-1621 INTRODUCTION TO PHILOSOPHY
POL-1531 INTRODUCTION AMERICAN GOVERNMENT 1
PSET-7718 INTRODUCTION NATIONAL ELECTRIC CODE
PSET-7739 INTRODUCTION STATIONARY ENGINEERING
PSY-1505 INTRODUCTION TO PSYCHOLOGY 1
PSY-1506 INTRODUCTION TO PSYCHOLOGY 2
PSY-1508 CHILD DEVELOPMENT
PSY-1510 ADOLESCENT DEVELOPMENT
RT-4719 PULMONARY DISEASES 2
SOC-1270 INTRODUCTION TO SOCIAL WORK
SOC-1271 SOCIAL WELFARE AND POLICIES
SOC-1521 INTRODUCTION TO SOCIOLOGY 1
SOC-1523 INTRODUCTION TO SOCIOLOGY 2
SPN-1080 ELEMENTARY SPANISH 1
SPN-1081 ELEMENTARY SPANISH 2
SPN-1082 ELEMENTARY SPANISH 3
SSC-1598 SEMINCAR IN COMMUNITY COLLEGES
SSM-1000 DISASTER PREPAREDNESS FOR HPS
SSM-4001 PROFESSIONALISM IN SSM
SSM-4002 LEGAL ISSUES IN SSM
SSM-4003 INTRODUCTION TO HOMELAND SEC MANAGEMENT
SSM-4004 PRINCIPLES OF SAFETY MANAGEMENT
SSM-4005 EMERGENCY PREP & RESPONSE
SSM-4123 UNDERSTANDING TERRORIST GROUPS
SSM-4131 INTRODUCTION TO ANALYTICAL CONCEPTS
SSM-4132 ANALYTICAL CONCEPTS SSM 1
SSM-4133 ANALYTICAL CONCEPTS SSM 2

Extension Sites

Cincinnati State provides college credit and non-credit courses through community learning centers located at the Cincinnati State West campus in Harrison, Countryside YMCA in Lebanon, the Health Careers Collaborative at the Health Alliance Business Center, Great Oaks Career Campuses, Lower Price Hill School, and the Workforce Development Center in Evendale.

Whether students earn college credit or seek personal enrichment, courses offered at the extension sites bring Cincinnati State programs to local neighborhoods. Courses offered at the extension sites are listed in the Term Schedule and are identified with a site abbreviation code under the "Building" (BLDG) column.

Weekend Classes

Cincinnati State schedules a range of classes on weekends. For selected associate's degree and certificate programs, the College provides opportunities for students to complete their programs with all classes scheduled in a combination of weekend and evening classes, or a combination of weekend and distance learning classes. Students seeking more information should contact the office of the dean of the division that offers the program of interest.

Courses Available for Credit by Cincinnati State Exam (Test Out)

For additional information on earning credit through internal exams, see "Advanced Standing Credit" on page 30.

Course Number and Name		Faculty Test Monitor
Business Technologies Division		
Graphic Imaging Technology		
GC 1415	Graphic Arts Processes	G. Walton
Office Technologies		
OT 1850	Computerized Business Applications	A. Eilers
OT 3002	Document Formatting 1	V. Johnson
OT 3007	Keyboarding	V. Johnson
Tests for Microsoft computer applications can be available through Microsoft Office Specialist Certification		C. Crossley
Center For Innovative Technologies		
Aviation Maintenance Technology		
AVT 81XX	All Aviation Maintenance Technology courses	J. Schmid
Biomedical Equipment and Information Systems Technology, Computer Network Engineering Technology, Electronics Engineering Technology		
BMT 7739	Introduction to Biomedical Instrumentation	S. Yelton
BMT 7749	Biomedical Instrumentation 1	S. Yelton
BMT 7759	Biomedical Instrumentation 2	S. Yelton
EET 7701	Electronic Fundamentals 1	L. Pohlgeers
EET 7706	Electrical Fundamentals for MET	D. Simmermon
EET 7707	Electrical Applications	L. Pohlgeers
EET 7710	DC Circuit Analysis	L. Morris
EET 7711	DC Circuits Lab	L. Morris
EET 7716	Computer Calculations for Electronics	S. Yelton
EET 7720	AC Circuit Analysis	L. Morris
EET 7721	AC Circuits Lab	L. Morris
EET 7728	Digital Combinational Logic	B. McLain
EET 7730	Electronics 1	L. Pohlgeers
EET 7738	Digital Sequential Logic	B. McLain
EET 7740	Electronics 2	L. Pohlgeers
EET 7748	Microprocessor Systems 1	B. McLain
EET 7750	Electronics 3	L. Pohlgeers
EET 7768	Microprocessor Systems 2	B. McLain
EET 7778	Programmable Logic Devices	B. McLain
Mechanical Engineering Technology		
MET 7108	Engineering Drawing 1 with AutoCAD	M. DeVore
MET 7310	Manufacturing Processes with CNC Programming 1	M. DeVore
Health and Public Safety Division		
BIO 4014	Anatomy & Physiology 1	R. Eveslage
BIO 4015	Anatomy & Physiology 2	R. Eveslage
BIO 4016	Anatomy & Physiology 3	R. Eveslage
BIOT 4091	Basic Techniques for Biotechnology	D. Vorbroker
CLT 4301	Basic Laboratory Techniques	K. Fields
CLT 4302	Basic Hematology & Hemostasis	K. Fields
CLT 4303	Basic Urinalysis and Body Fluids	K. Fields
CLT 4321	Introduction to Clinical Lab Science	K. Fields
HIM 4400	Introduction to Health Information Management	C. Kneip
HIM 4410	Basic CPT Coding	S. Mallett
HIM 4420	Basic ICD-9-CM Coding	S. Mallett
HIM 4421	Intermediate ICD-9-CM Coding	S. Mallett
HIM 4451	Intermediate CPT Coding	S. Mallett
MCH 4002	Informatics in Healthcare	D. Robinson
MCH 4805	Patient Care Skills	D. Lierl
MCH 4806	Medical Terminology 1	D. Robinson
MCH 4807	Medical Terminology 2	D. Robinson
MCH 4840	Orientation to the Health Record	D. Robinson
MCH 4841	Unit Coordinator Procedures 1	D. Robinson
MCH 4842	Unit Coordinator Procedures 2	D. Robinson
Humanities Division		
English Composition		
ENG 1001	English Composition 1	G. Woolf
ENG 1002	English Composition 2	G. Woolf
ENG 1010	Technical Writing 1	G. Woolf
ENG 1011	Business Communication	G. Woolf
Psychology		
PSY 1505	Introduction to Psychology 1	P. Davis
PSY 1506	Introduction to Psychology 2	P. Davis
PSY 1508	Psychology: Child Development	P. Davis
PSY 1509	Psychology: Adult Development	P. Davis
PSY 1510	Psychology: Adolescent Development	P. Davis
Economics		
ECO 1512	Microeconomics	P. Davis
ECO 1513	Macroeconomics	P. Davis
Sociology and Labor Relations		
SOC 1521	Introduction to Sociology 1	C. Bossard
SOC 1523	Introduction to Sociology 2	C. Bossard
SOC 1525	Changing Roles for Men & Women	C. Bossard
SOC 1526	Sociology: Marriage and the Family	C. Bossard
LBR 1535	Introduction to Labor/ Management Relations	P. Davis
LBR 1539	Introduction to Employment and Workplace Law 1	P. Davis
Spanish		
SPN 1076	Spanish Conversation and Composition	R. Moreno
SPN 1080	Elementary Spanish 1	R. Moreno
SPN 1081	Elementary Spanish 2	R. Moreno
SPN 1082	Elementary Spanish 3	R. Moreno
SPN 1083	Intermediate Spanish 1	R. Moreno
SPN 1084	Intermediate Spanish 2	R. Moreno
SPN 1085	Intermediate Spanish 3	R. Moreno
Sciences Division		
MAT 1105	Mathematics for the Health Professions	Freeman/Erdmann
MAT 1121	Business Math 1	Freeman/Erdmann
MAT 1122	Business Math 2	Freeman/Erdmann
MAT 1123	Business Math 3	Freeman/Erdmann
MAT 1124	Business Algebra	Freeman/Erdmann
MAT 1128	Business Calculus	Freeman/Erdmann
MAT 1151	College Algebra 1	Freeman/Erdmann
MAT 1152	Pre-Calculus	Freeman/Erdmann
MAT 1154	Calculus 1	Freeman/Erdmann
MAT 1155	Calculus 2	Freeman/Erdmann
MAT 1191	Algebra and Trigonometry 1	Freeman/Erdmann
MAT 1192	Algebra and Trigonometry 2	Freeman/Erdmann
MAT 1193	Analytic Geometry and Calculus 1	Freeman/Erdmann

Transfer Module

The State of Ohio has developed a statewide policy to facilitate movement of students and transfer credits from one Ohio public college or university to another. (See policy statement on page 38.)

The Cincinnati State Transfer Module consists of 55 to 59 quarter credit hours that transfer to any public Ohio two- or four-year college. Categories contained in the Transfer Module are:

- English Composition
- Mathematics
- Arts/Humanities
- Social/Behavioral Sciences
- Biological/Physical Sciences

Students earning the Transfer Module select courses from these categories. The Transfer Module requirements are included in the degree requirements for students earning the Associate of Arts (AA) or Associate of Science (AS); however, students earning the AA or AS degree also are required to complete additional courses selected from the Transfer Module categories. The AA/AS requirements begin on page 72.

Students completing the Transfer Module should consult with their academic advisor to ensure that courses selected are appropriate for the institution and the degree program that the student plans to pursue after completing studies at Cincinnati State

The following courses constitute the Transfer Module:

ENGLISH COMPOSITION — **9 credits**

Select one three-course sequence.

		(credits)
ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1003	English Composition 3	3
ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1010	Technical Writing 1	3
or		
ENG 1011	Business Communications	3
ENG 1001	English Composition 1	3
ENG 1010	Technical Writing 1	3
ENG 1015	Technical Writing 2	3

MATHEMATICS — **4 credits minimum**

Note: Students must complete MAT 1151, MAT 1191, or have appropriate placement test score before enrolling in any of the classes listed.

MAT 1112	Statistics 2	3
MAT 1113	Statistics 3	3
MAT 1128	Business Calculus	5
MAT 1152	Pre-Calculus 1	5
MAT 1153	Pre-Calculus 2	5
MAT 1154	Calculus 1	5
MAT 1155	Calculus 2	5
MAT 1156	Calculus 3	5
MAT 1173	Algebra and Trigonometry 2 with Statistics	4
MAT 1192	Algebra and Trigonometry 2	4
MAT 1193	Technical Calculus	4

SOCIAL/BEHAVIORAL SCIENCES — **15 credits**

Select five courses from at least two areas.

Economics

ECO 1512	Microeconomics	3
ECO 1513	Macroeconomics	3
ECO 1514	International Aspects of Economics	3

Geography

GEO 1551	World Regional Geography 1	3
GEO 1552	Cultural Geography	3
GEO 1553	World Regional Geography 2	3

History

HST 1561	World Civilization before 1000	3
HST 1562	World Civilization, 1000 to 1815	3
HST 1563	World Civilization after 1815	3
HST 1568	American History to 1860	3
HST 1569	American History, 1860 to 1914	3
HST 1570	American History after 1914	3
HST 1575	History of Africa	3
HST 1576	African-American History to 1860	3
HST 1577	African-American History, 1860 to 1929	3
HST 1578	African-American History after 1929	3

Labor Relations

LBR 1535	Intro. to Labor/Mgmt. Relations	3

Political Science

POL 1531	Introduction to American Govt. 1	3
POL 1532	Introduction to American Govt. 2	3
POL 1533	Intro. to Comparative Governments	3

Psychology

PSY 1505	Introduction to Psychology 1	3
PSY 1506	Introduction to Psychology 2	3
PSY 1507	Abnormal Psychology	3
PSY 1508	Child Psychology	3
PSY 1509	Adult Psychology	3
PSY 1510	Adolescent Psychology	3
PSY 1511	Social Psychology	3

Sociology

SOC 1521	Introduction to Sociology 1	3
SOC 1523	Introduction to Sociology 2	3
SOC 1525	Changing Roles for Men & Women	3
SOC 1526	Sociology: Marriage & the Family	3

ARTS/HUMANITIES — **15 credits**

Select five courses from at least two areas.

Art

ART 1660	Introduction to Art	3
ART 1662	Art of the Ancient World	3
ART 1663	Art of Medieval & Ren. World	3
ART 1664	Art of Modern World	3

Communication

COMM 1040	Mass Media and Culture	3
COMM 1044	Introduction to Film Studies, 1890s to 1950s	3
COMM 1045	Introduction to Film Studies, 1950s to present	3

Culture Studies

CULT 1645	Technology and Culture	3
CULT 1647	Work and Society	3

Literature and Composition

LIT 1040	Survey of American Literature to 1860	3
LIT 1041	Survey of American Literature 1860 to 1914	3
LIT 1042	Survey of American Literature after 1914	3
LIT 1045	Survey of British Literature before 1500	3
LIT 1046	Survey of Renaissance and 18th Century British Literature	3
LIT 1047	Survey of 19th and 20th Century British Literature	3
LIT 1048	Introduction to Shakespeare	3
LIT 1050	The Short Story	3
LIT 1051	Drama	3
LIT 1052	Poetry	3
LIT 1053	The Novel	3
LIT 1054	Children's Literature	3
LIT 1055	Science Fiction	3
LIT 1056	Women Writers	3
LIT 1057	African-American Writers	3
LIT 1058	Introduction to Literature	3

Music

MUS 1665	Introduction to Music: Middle Ages to Early 19th Century	3
MUS 1666	Introduction to Music: The 19th and 20th Centuries	3
MUS 1667	Introduction to Music: Musical Styles	3

Philosophy

PHI 1620	Critical Thinking	3
PHI 1621	Introduction to Philosophy	3
PHI 1625	Ethics	3
PHI 1630	Comparative World Religions: Asia	3
PHI 1631	Comparative World Religions: Middle East	3

Theatre

THE 1670	Theatre Appreciation	3
THE 1671	History of Theatre	3

BIOLOGICAL/PHYSICAL SCIENCES **12 credits**

Biology

BIO 4071	Concepts of Biology 1	4
BIO 4072	Concepts of Biology 2	4
BIO 4073	Concepts of Biology 3	4
BIO 4081	Biology 1	5
BIO 4082	Biology 2	5
BIO 4083	Biology 3	5
BIO 4009	General Microbiology	4
BIO 4014	Anatomy and Physiology 1	4
BIO 4015	Anatomy and Physiology 2	4
BIO 4016	Anatomy and Physiology 3	4

Chemistry

CHE 2231	Fundamentals of General Chemistry	4
CHE 2232	Fundamentals of Organic Chemistry	4
CHE 2233	Fundamentals of Biochemistry	4
CHE 2251	Freshman Chemistry 1	5
CHE 2252	Freshman Chemistry 2	5
CHE 2253	Freshman Chemistry 3	5
CHE 2281	Organic Chemistry 1	3
CHE 2282	Organic Chemistry 2	3
CHE 2283	Organic Chemistry 3	3
CHE 2284	Organic Chemistry 1 Lab	2
CHE 2285	Organic Chemistry 2 Lab	2
CHE 2286	Organic Chemistry 3 Lab	2
CMT 6611	Chemistry 1/Quant. Analysis	6
CMT 6621	Chemistry 2/Quant. Analysis	6
CMT 6631	Chemistry 3/Quant. Analysis	6

Environmental Science

EVS 7622	Environmental Conservation and Clean up	4
EVS 7623	Environmental Geology	4
EVS 7624	Ecology and Ecosystems	4

Physical Science

PSC 2264	Astronomy 1 - Solar System	4
PSC 2265	Astronomy 2 - The Universe	4
PSC 2267	Energy	4
PSC 2269	Hydrology and Meteorology	4
PSC 2277	Geology	4

Physics

PHY 2291	Physics 1	4
PHY 2292	Physics 2	4
PHY 2293	Physics 3	4
PHY 2294	Modern Physics	4
PHY 2295	Physics 1 (Calculus Based)	5
PHY 2296	Physics 2 (Calculus Based)	5
PHY 2297	Physics 3 (Calculus Based)	5

Associate of Arts and Associate of Science Degrees

Program Chair: Joyce Rimlinger
Co-op Coordinator: Jayne Martin Dressing
Advisor: Julie McLaughlin

Cincinnati State offers the Associate of Arts and Associate of Science degrees, which are often called "university parallel degrees" or "transfer degrees," because they provide the first two years of a bachelor's degree program. The primary purpose of the Associate of Arts and Associate of Science degrees is to prepare students for transfer to a four-year college or university. Students who earn these degrees and have an overall grade point average of 2.0 or better are given preferential consideration for admission to Ohio public universities.

To earn an Associate of Arts or Associate of Science degree at Cincinnati State students must complete at least 102 credit hours of courses from these areas:

- English Composition
- Mathematics
- Biological/Physical Sciences
- Social/Behavioral Sciences
- Arts/Humanities
- Computer Literacy
- Cooperative Education/Career Exploration

The Associate of Arts degree is for students who desire to pursue a bachelor's degree by completing the first two years at Cincinnati State in program areas such as:

- Communication
- Criminal Justice
- Education
- English
- Fine Arts
- History
- International Affairs
- Philosophy
- Political Science
- Pre-Law
- Pre-Mortuary Science
- Psychology
- Social Work
- Sociology
- Spanish
- Sports Management
- Theatre
- Urban Planning
- Urban Studies

The Associate of Science degree is for students who desire to pursue a bachelor's degree by completing the first two years at Cincinnati State in program areas such as:

- Biology
- Chemistry
- Mathematics
- Meteorology
- Physics
- Pre-Dentistry
- Pre-Medicine
- Pre-Optometry
- Pre-Pharmacy
- Pre-Veterinary Medicine
- Zoology

Students who seek the Associate of Arts or Associate of Science degree need to be familiar with the requirements for the bachelor's degree at the institution where they intend to complete their studies. Students work with a Cincinnati State faculty advisor to develop a planned curriculum of required and elective courses. This plan should allow a full-time student to transfer to the desired four-year institution at junior status after two years or less. Students who need additional preparation or attend part-time may take longer than two years to complete their degree requirements.

Associate of Arts Degree Requirements

All degree-seeking students must complete one of the FYE courses (FYE 9001 Survival Skills, FYE 9002 College Success Strategies, or FYE 9003 The Community College Experience) as part of the first 18 credit hours taken at Cincinnati State.

English Composition:	9 credits – select one sequence
Mathematics:	4 credits – select one or two Transfer Module courses
Oral Communication:	3 credits – select one course
Social/ Behavioral Sciences:	15 credits – select Transfer Module courses from at least two areas
Arts/Humanities:	15 credits – select Transfer Module courses from at least two areas
Distributive Credits:	12 credits – select courses from Social/Behavioral Sciences or Arts/Humanities
Biological/Physical Sciences:	12 credits
Computer Literacy:	6 credits
Cooperative Education:	7 credits – complete HUM 9801 and consult the co-op coordinator to select additional courses from HUM 9802, HUM 9803, HUM 9804, HUM 9805, HUM 9806, and HUM 9807
Electives:	19 credits – in consultation with their advisor, students select courses that meet general and programmatic requirements of the institution where they plan to complete a bachelor's degree
	Total – 102 credit hours minimum

Associate of Science Degree Requirements

All degree-seeking students must complete one of the FYE courses (FYE 9001 Survival Skills, FYE 9002 College Success Strategies, or FYE 9003 The Community College Experience) as part of the first 18 credit hours taken at Cincinnati State.

English Composition:	9 credits – select one sequence
Mathematics:	8 credits – select two or three Transfer Module courses
Oral Communication:	3 credits – select one course
Social/ Behavioral Sciences:	15 credits – select Transfer Module courses from at least two areas
Arts/Humanities:	15 credits – select Transfer Module courses from at least two areas
Biological/Physical Sciences:	24 credits
Computer Literacy:	6 credits
Cooperative Education:	7 credits – complete HUM 9801 and consult the co-op coordinator to select additional courses from HUM 9802, HUM 9803, HUM 9804, HUM 9805, HUM 9806, and HUM 9807
Electives:	15 credits – in consultation with their advisor, students select courses that meet general and programmatic requirements of the institution where they plan to complete a bachelor's degree
	Total – 102 credit hours minimum

Courses that meet Associate of Arts and Associate of Science Requirements

Students in the Associate of Arts and Associate of Science programs should complete the transfer module as part of their degree.

ENGLISH COMPOSITION **9 credits**

Select one three-course sequence. (credits)

ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1003	English Composition 3	3

ENG 1001	English Composition 1	3
ENG 1002	English Composition 2	3
ENG 1010	Technical Writing 1	3
or		
ENG 1011	Business Communications	3

ENG 1001	English Composition 1	3
ENG 1010	Technical Writing 1	3
ENG 1015	Technical Writing 2	3

MATHEMATICS **4 credits – AA / 8 credits – AS**

Note: Students must complete MAT 1111, 1151, 1191, or appropriate placement test score before enrolling in any of the classes listed. Courses listed below are Transfer Module courses.

MAT 1112	Statistics 2	3
MAT 1113	Statistics 3	3
MAT 1128	Business Calculus	5
MAT 1152	Pre-Calculus 1	5
MAT 1153	Pre-Calculus 2	5
MAT 1154	Calculus 1	5
MAT 1155	Calculus 2	5
MAT 1156	Calculus 3	5
MAT 1173	Algebra and Trigonometry 2 with Statistics	4
MAT 1192	Algebra and Trigonometry 2	4
MAT 1193	Technical Calculus	4

ORAL COMMUNICATIONS **3 credits**

COMM 1020	Public Speaking	3
COMM 1021	Advanced Public Speaking	3
COMM 1023	Interpersonal Communication	3
COMM 1024	Group Dynamics	3
COMM 1025	Small Group Communication	3

SOCIAL/BEHAVIORAL SCIENCES **15 credits**

Courses listed below are Transfer Module courses. Select five courses from at least two areas.

Economics

ECO 1512	Microeconomics	3
ECO 1513	Macroeconomics	3
ECO 1514	International Aspects of Economics	3

Geography

GEO 1551	World Regional Geography 1	3
GEO 1552	Cultural Geography	3
GEO 1553	World Regional Geography 2	3

History

HST 1561	World Civilization before 1000	3
HST 1562	World Civilization, 1000-1815	3
HST 1563	World Civilization after 1815	3
HST 1568	American History to 1860	3
HST 1569	American History, 1860 to 1914	3
HST 1570	American History after 1914	3
HST 1575	History of Africa	3
HST 1576	African-American History to 1860	3
HST 1577	African-American History, 1860 to 1929	3
HST 1578	African-American History after 1929	3

Labor Relations

LBR 1535	Intro. to Labor/Mgmt Relations	3

Political Science

POL 1531	Intro. to American Govt. 1	3
POL 1532	Intro. to American Govt. 2	3
POL 1533	Intro. to Comparative Govts.	3

Psychology

PSY 1505	Introduction to Psychology 1	3
PSY 1506	Introduction to Psychology 2	3
PSY 1507	Abnormal Psychology	3
PSY 1508	Child Psychology	3
PSY 1509	Adult Psychology	3
PSY 1510	Adolescent Psychology	3
PSY 1511	Social Psychology	3

Sociology

SOC 1521	Introduction to Sociology 1	3
SOC 1523	Introduction to Sociology 2	3
SOC 1525	Changing Roles for Men & Women	3
SOC 1526	Sociology: Marriage & the Family	3

ARTS/HUMANITIES **15 credits**

Courses listed below are Transfer Module courses.
Select five courses from at least two areas.

Art

ART 1660	Introduction to Art	3
ART 1662	Art of the Ancient World	3
ART 1663	Art of Medieval & Ren. World	3
ART 1664	Art of Modern World	3

Communication

COMM 1040	Mass Media and Culture	3
COMM 1044	Introduction to Film Studies, 1890s to 1950s	3
COMM 1045	Introduction to Film Studies, 1950s to present	3

Culture Studies

CULT 1645	Technology and Culture	3
CULT 1647	Work and Society	3

Literature and Composition

LIT 1040	Survey of American Literature to 1860	3
LIT 1041	Survey of American Literature 1860 to 1914	3
LIT 1042	Survey of American Literature after 1914	3
LIT 1045	Survey of British Literature before 1500	3
LIT 1046	Survey of Renaissance and 18th Century British Literature	3
LIT 1047	Survey of 19th and 20th Century British Literature	3
LIT 1048	Introduction to Shakespeare	3
LIT 1050	The Short Story	3
LIT 1051	Drama	3
LIT 1052	Poetry	3
LIT 1053	The Novel	3
LIT 1054	Children's Literature	3
LIT 1055	Science Fiction	3
LIT 1056	Women Writers	3
LIT 1057	African-American Writers	3
LIT 1058	Introduction to Literature	3

Music

MUS 1665	Introduction to Music: Middle Ages to Early 19th Century	3
MUS 1666	Introduction to Music: The 19th and 20th Centuries	3
MUS 1667	Introduction to Music: Musical Styles	3

Philosophy

PHI 1620	Critical Thinking	3
PHI 1621	Introduction to Philosophy	3
PHI 1625	Ethics	3
PHI 1630	Comparative World Religions: Asia	3
PHI 1631	Comparative World Religions: Middle East	3

Theatre

THE 1670	Theatre Appreciation	3
THE 1671	History of Theatre	3

DISTRIBUTIVE CREDITS **12 credits - AA**

Students should select distributive courses from the list of Social/Behavioral Sciences or Arts/Humanities courses above or from the list below. These courses should be selected with the help of an advisor to meet requirements of the bachelor's degree in which the student plans to enroll.

Art

ART 1685	Introduction to Photography	3
ART 1690	Drawing 1	3
ART 1691	Drawing 2	3
ART 1692	Design 1	3
ART 1694	Sculpture 1	3
ART 1695	Sculpture 2	3

Criminal Justice

CRJ 1250	Introduction to Criminal Justice	3
CRJ 1251	Introduction to Policing & Law Enforcement	3
CRJ 1252	Introduction to Corrections	3
CRJ 1253	Criminal Courts & Procedures 1	3
CRJ 1254	Criminal Courts & Procedures 2	3
CRJ 1255	Criminal Law	3
CRJ 1256	Criminal Investigation Skills	3
CRJ 1257	Juvenile Delinquency	3
CRJ 1258	Workshops in Criminal Justice	3
CRJ 1259	Special Studies in Criminal Justice	3

Communication

COMM 1031	News Writing 1	3
COMM 1032	News Writing 2	3
COMM 1033	Journalism Practicum 1	3
COMM 1050	Introduction to Broadcasting	3

Culture Studies

CULT 1602	Issues in Human Diversity	3

Foreign Languages

FRN 1060	Elementary French 1	4
FRN 1061	Elementary French 2	4
FRN 1062	Elementary French 3	4
FRN 1063	Intermediate French 1	4
FRN 1064	Intermediate French 2	4
FRN 1065	Intermediate French 3	4
SPN 1076	Spanish Conversation & Composition	2
SPN 1080	Elementary Spanish 1	4
SPN 1081	Elementary Spanish 2	4
SPN 1082	Elementary Spanish 3	4
SPN 1083	Intermediate Spanish 1	4
SPN 1084	Intermediate Spanish 2	4
SPN 1085	Intermediate Spanish 3	4
ITP 1086*	Beginning ASL 1	4
ITP 1087*	Beginning ASL 2	4
ITP 1088*	Beginning ASL 3	4
ITP 1091*	Intermediate ASL 1	4
ITP 1092*	Intermediate ASL 2	4
ITP 1093*	Intermediate ASL 3	4
ITP 1094*	Advanced ASL 1	4
ITP 1095*	Advanced ASL 2	4
ITP 1096*	Advanced ASL 3	4

* Some schools do not accept American Sign Language as a foreign language. Check with your advisor before starting the American Sign Language sequence.

Humanities

HUM 1698	Special Topics in Humanities	3
HUM 1699	Special Problems in Humanities	3

Labor Relations

LBR 1539	Introduction to Employment & Workplace Law 1	3
LBR 1540	Introduction to Employment & Workplace Law 2	3

Literature and Composition

ENG 1036	Creative Writing: Poetry	3
ENG 1037	Creative Writing: Short Fiction	3
ENG 1038	Creative Writing: Non Fiction	3
ENG 1039	Creative Writing: Writing for Children	3
LIT 1059	Topics in Literature	3

Psychology

PSY 1502	Human Relations	3
PSY 1504	Psychology of Stress Management	3

Social Sciences

SSC 1598	Topics in Social Sciences	3

Sociology

SOC 1270	Introduction to Social Work	3
SOC 1271	Social Welfare and Policies	3
SOC 1272	Social Problems	3
SOC 1273	Drugs in Society	3

BIOLOGICAL/PHYSICAL SCIENCES **12 credits - AA**
24 credits -AS

Biology

BIO 4071	Concepts of Biology 1	4
BIO 4072	Concepts of Biology 2	4
BIO 4073	Concepts of Biology 3	4
BIO 4081	Biology 1	5
BIO 4082	Biology 2	5
BIO 4083	Biology 3	5
BIO 4009	General Microbiology	4
BIO 4014	Anatomy and Physiology 1	4
BIO 4015	Anatomy and Physiology 2	4
BIO 4016	Anatomy and Physiology 3	4

Chemistry

CHE 2231	Fundamentals of General Chemistry	4
CHE 2232	Fundamentals of Organic Chemistry	4
CHE 2233	Fundamentals of Biochemistry	4
CHE 2251	Freshman Chemistry 1	5
CHE 2252	Freshman Chemistry 2	5
CHE 2253	Freshman Chemistry 3	5
CHE 2281	Organic Chemistry 1	3
CHE 2282	Organic Chemistry 2	3
CHE 2283	Organic Chemistry 3	3
CHE 2284	Organic Chemistry 1 Lab	2
CHE 2285	Organic Chemistry 2 Lab	2
CHE 2286	Organic Chemistry 3 Lab	2
CMT 6611	Chemistry 1 & Quant. Analysis	6
CMT 6621	Chemistry 2 & Quant. Analysis	6
CMT 6631	Chemistry 3 & Quant. Analysis	6

Environmental Science

EVS 7622	Environmental Conservation and Clean up	4
EVS 7623	Environmental Geology	4
EVS 7624	Ecology and Ecosystems	4

Physical Science

PSC 2264	Astronomy 1 - Solar System	4
PSC 2265	Astronomy 2 - The Universe	4
PSC 2267	Energy	4
PSC 2269	Hydrology and Meteorology	4
PSC 2277	Geology	4

Physics

PHY 2291	Physics 1	4
PHY 2292	Physics 2	4
PHY 2293	Physics 3	4
PHY 2294	Modern Physics	4
PHY 2295	Physics 1 (Calculus Based)	5
PHY 2296	Physics 2 (Calculus Based)	5
PHY 2297	Physics 3 (Calculus Based)	5

COMPUTER LITERACY **6 credits**

OT 1850	Computerized Business Applications	4
OT 1863	Electronic Spreadsheets (Excel)	3
OT 3058	MS Word for Windows	3
OT 3062	Database/Spreadsheet Applications	3
OT 3064	Introduction to PowerPoint	3
OT 3068	Database Management: Access 1	3
OT 3092	Microsoft Publisher	3
OT 3095	Intro: Computers, Windows, Internet	3
OT 3096	Internet/Office Communications	3
IT 5102	Intro to MacIntosh	3
IT 5201	Information Technology Concepts	3
IT 5410	Cross Platform Computing	3
IT 5420	Digital Media Concepts	3

COOPERATIVE EDUCATION **7 credits**

The Associate of Arts and Associate of Science programs share the College's commitment to cooperative education as an integral part of the curriculum. Cooperative education allows students to apply the concepts learned in the classroom with practical, hands-on experience in real work environments.

In order to complete the AA or AS degree at Cincinnati State, students must earn no fewer than seven credits in work exploration/experience, selected from the courses described below.

All students seeking the AA or AS degree must successfully complete HUM 9801 - Career Exploration Seminar. Students should enroll in this course in their fourth or fifth term.

All students seeking the AA or AS degree must meet with the co-op coordinator one term prior to participating in work experience (co-op/internship) classes. Students will complete four credits selected from courses HUM 9802, HUM 9803, HUM 9804, HUM 9805, HUM 9806, or HUM 9807. Other classes may not be substituted for the work experience courses without prior approval of the program chair and the cooperative education coordinator. However, students with prior work experience that is related to their post-baccalaureate career goals may be eligible to receive credit through the standard College procedures for granting Advanced Standing Credit.

HUM 9801	Career Exploration Seminar	3
HUM 9802	Internship - Humanities & Sciences	2
HUM 9803	Cooperative Employment - Humanities & Sciences	2
HUM 9804	Parallel Cooperative Employment - Humanities & Sciences	1
HUM 9805	Career Education Project - Humanities & Sciences	2
HUM 9806	Career Education Project - Humanities & Sciences	4
HUM 9807	Internship - Humanities & Sciences	4

ELECTIVES **19 credits – AA / 15 credits – AS**

Students should choose electives based on knowledge of general and programmatic requirements of the institution where they plan to earn a bachelor's degree. Any course in the list of requirements above (except courses in the Computer Literacy and Cooperative Education categories) may be used as an elective. Students may use other courses as electives with the prior permission of the advisor.

Associate of Individualized Study

Cincinnati State offers the Associate of Individualized Study (AIS) degree to meet unique career education needs for students whose careers objectives cannot be achieved through one of the existing associate's degree programs offered by the College.

A student who wishes to be considered for admission to an AIS program must:

1. Meet with the program chair for the Associate of Arts/ Associate of Science degree. This meeting is used to make a preliminary determination of whether the student's request for an AIS program is likely to be approved. If approval seems likely, an academic advisor for the AIS program is assigned.
2. Consult with the assigned academic advisor, who assists the student in planning the curriculum for the AIS program. This curriculum must include no fewer than 90 total credits, and must include all College-wide graduation requirements.
3. Complete all College admissions requirements, as described in the "Admissions, Fees, and Financial Aid" section of this catalog.
4. Write and deliver to the assigned academic advisor a justification of the proposed degree program, including a statement of career goals and an explanation of why another associate's degree program would not be appropriate.

The student's academic advisor presents the proposed AIS curriculum to the College's Academic Policies and Curriculum Committee (APCC) for approval. The APCC approves or denies the AIS program proposal. The APCC may seek additional information and/or suggest modifications to the proposed AIS curriculum prior to taking action.

If the proposed AIS is approved, the student is admitted to the AIS program. If the proposed AIS is denied, the student may wish to apply to another associate's degree program.

Associate of Technical Study

Associate of Technical Study – Type A

The Associate of Technical Study (ATS) – Type A degree program allows a student to meet unique career objectives by receiving college credit for qualified non-college training programs, and combining this training with courses from two or more existing Cincinnati State associate's degree programs.

A student who wishes to be considered for admission to an ATS - Type A program must follow the steps outlined above for the AIS degree. The proposed ATS - Type A degree program must be approved by the College's Academic Policies and Curriculum Committee (APCC).

Associate of Technical Study – Type B

The Associate of Technical Study (ATS) – Type B degree program allows the College to develop associate's degree programs in partnership with professional organizations or businesses that provide specific training programs for their members or employees. The training program is examined by a College review committee to determine if it qualifies for inclusion in an ATS – Type B program. If qualified, the training program is awarded a set number of college credits. Additional components of the proposed degree program are also determined by the review committee.

When implemented, an ATS – Type B program accommodates students who have completed educational programs that are outside traditional college coursework, and allows these students to supplement their professional training with the additional enriching components of a college associate's degree program.

Existing ATS – Type B programs are identified within the academic division sections of this catalog.

A student who wishes to be considered for admission to an ATS - Type B program must follow the steps outlined above for the AIS degree. The proposed ATS - Type B degree program must be approved by the APCC.

Business Technologies Division

Division Phone Number: (513) 569-1620

Cincinnati State meets the need for specialized business training with Associate of Applied Business degree programs, an Associate of Arts degree in Pre-Business Administration, an Associate of Applied Science degree, and several certificate programs. Organized job experience through cooperative education work assignments with leading business firms is a key phase of the learning program. Business courses, combined with job-related activities during 10-week co-op terms, provide students with both business skills and business experience. Upon completion of the two-year degree program in business, students earn an associate's degree.

Credits earned in the degree programs are transferable. Cincinnati State has established articulation agreements with the College of Mount St. Joseph, Mount Vernon Nazarene University, Thomas More College, Xavier University, Northern Kentucky University, University of Cincinnati, Miami University, Rochester Institute of Technology, Union Institute and University, Wilmington College, and Franklin University.

Entrance Competencies

In order to ensure a high degree of success in academic studies in business technologies, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS®, the college admissions/ placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Cooperative Education – Working for Success Experience

Cooperative education allows students to apply the concepts learned in the classroom to the business world and to gain practical experience that enhances employment after graduation. Therefore, in the Business Technologies Division all students (except in the Dietetic Technician Program and the Dietary Manager Program) must earn eight to 10 credit hours in cooperative education .

The Business Technologies Division's Working for Success Experience, a series of practice-oriented courses, ensures student success in preparing for and achieving career goals. The foundation for the program is set with course FYE 9002 – College Success Strategies, the first course in the series. This course prepares students for their college experiences and provides a map for a successful transition to college life. College Success Strategies sets the stage for classroom, lab, and cooperative education experiences at Cincinnati State.

The Working for Success Experience continues with BT 9200 – Professional Practices. This course prepares students for the cooperative education experience. Through Professional Practices, students learn fundamental skills required to gain employment such as goal setting, career research, resume writing, interviewing, and negotiating. Additionally, students gain job success competencies ranging from business etiquette to business ethics. Upon completion of this course, students are ready for the practical experience provided by cooperative education.

The primary element in the practice-oriented education provided by the Working for Success Experience is cooperative education. Cincinnati State's cooperative education program reinforces the concept that learning occurs best with the integration of classroom studies and related work experience. Through mandatory co-op experiences, students complete several terms of meaningful employment that is structured, managed, and evaluated in a systematic way to help students realize their career goals. By com-

pleting learning modules, students acquire additional skill sets necessary to sustain employment. In exceptional situations, students - in consultation with their program coordinators - may fulfill the co-op requirement through registration in co-op seminar course(s) BUS 9230, BUS 9231, and BUS 9232. Additional guidelines for meeting the co-op requirement are outlined below.

Once students complete co-op requirements, they enroll in the third course of the Working for Success Experience, BUS 9233 – Business Competencies. This capstone course ties the practice-oriented sequence together with the experiences of the preceding courses. Students gain practical experience as they complete educational units that build the competencies needed to advance in their chosen field of work. The Business Competencies course includes mandatory community service. Part of the enrichment this education provides is the realization that with education and career come a responsibility to the community. The capstone course helps students gain that perspective and form the foundation for good citizenship.

The Cooperative Education Requirement

1. Students can meet the Business Technologies Division cooperative education requirement in these three ways:
   - Complete the traditional cooperative education work experiences
   - Fulfill the requirements by applying for advanced standing
   - Complete the co-op seminar classes satisfactorily; this requires the coordinator's prior approval
2. To be eligible to participate in the cooperative education program, students must meet the following requirements:
   - Matriculate as a student
   - Maintain a GPA of 2.0 or higher, and complete any required program technical courses (See co-op coordinator for list)
   - Attend a co-op orientation session, complete an application to co-op packet, and return it to the program co-op coordinator before consideration for placement
   - Agree to follow the curriculum and meet all program requirements as specified
   - Agree not to seek full-time employment with a co-op employer until graduation
   - Understand that co-op students are not eligible for unemployment benefits for co-op positions, and as such, agree not to apply for them
   - Gain prior coordinator approval if it is necessary to drop out of co-op employment and complete the remainder of the co-op requirements by taking co-op seminar courses. If students leave co-op employment, they are eligible to re-enter only with approval of the co-op coordinator
3. Students may complete the required co-op experience on either an alternating or parallel track depending on the availability of positions. Students must meet with their co-op coordinator as soon as possible after admission to their academic program to complete their co-op plan.
4. The Business Technologies Division assists students in completing their cooperative education work experiences. Although the division's co-op coordinators are generally successful in finding interview opportunities for co-op students, there is no employment guarantee. If employment is unavailable, the co-op coordinator works with students on alternatives to fulfill the cooperative education requirement.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of this catalog.

Associate's degree programs in the Business Technologies Division contain in their curricula most of the required courses for the Cincinnati State transfer module. Students who wish to complete the transfer module should schedule the additional courses at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that the Cincinnati State Associate of Applied Business degree combined with a transfer module showing grades of C or higher receives preferential consideration at the receiving institution.

Pre-Business Administration (PBA) Transfer Degree

Program Chair: Linda Schaffeld
Co-op Coordinator: Kelly Harper

The primary objective of the Pre-Business Administration degree program is to provide for transfer to a four-year institution rather than preparation for a job. The program provides students with basic coursework that enables them to transfer to baccalaureate programs in business administration, accounting, finance, management, or marketing. Students complete general education requirements and selected business core courses to prepare for work in their major at the senior institution. The Pre-Business Administration transfer curriculum leads to the Associate of Arts degree, and meets the transfer module requirements for transfer to Ohio public colleges and universities.

Students who plan to transfer to a baccalaureate program in business must be aware of significant differences in course requirements and the application of transfer credits at the various institutions in the region. They should work closely with their academic advisors from Cincinnati State and with the transfer coordinator of the receiving institution to tailor their academic program for transfer to another institution.

The following is an example of general requirements for a Pre-Business Administration degree:

	Credit Hours
English Composition	9
Mathematics (Algebra & Statistics)	10
Social/Behavioral Sciences	15
Communication	3
Arts/Humanities	15
Biological/Physical Sciences	12
Business	37
Cooperative Education	6
Total Credit Hours:	107

For specific requirements, contact the program chair.

Nutrition Science Technology (NSUC) Transfer Degree

Program Chair: Laura Horn, MEd, RD, LD
Co-op Coordinator: Kelly Harper

The primary objective of the Nutrition Science Technology degree program is to provide transfer to a four-year institution rather than preparation for a job. The program provides students with basic coursework that enables them to transfer to baccalaureate programs in dietetics with emphasis in business, exercise, or dietetic coordinated programs. The Nutrition Science Technology curriculum leads to the Associate of Science degree and meets the requirements for transfer to Ohio public colleges and universities. Students who plan to transfer to a baccalaureate program in dietetics must be aware of significant differences in course requirements and the application of transfer credits at various institutions in the region. They should work closely with their academic advisors from Cincinnati State and the advisor at the college

where they intend to complete their baccalaureate degree. Students who complete a baccalaureate degree program are required to complete an internship before they can take the credentialing exam given by the Commission on Dietetic Registration.

The following is an example of general requirements for a Nutrition Science Technology degree:

	Credit Hours
English Composition	9
Mathematics (Algebra & Statistics)	9
Social/Behavioral Science	15
Communications	3
Arts/Humanities	15
Biological/Physical Sciences	28
Business	9
Dietetic/Culinary	18
Cooperative Education	4
Total Credit Hours	110

For specific requirements, contact the program chair.

Accounting Technology (ACCT)

Program Chair: Michele Geers
Co-op Coordinator:
Advisor: Yvonne Baker

The Accounting Technology program provides students with an understanding of accounting skills and knowledge of business fundamentals. Students enhance their skills through cooperative education with small and large CPA firms; manufacturing, merchandising, and service companies; financial institutions; not-for-profit organizations; and government agencies. Students learn the fundamentals of financial, managerial, and tax accounting and gain a background in communication skills and management philosophy. Students earn an Associate of Applied Business degree upon completing the program. Graduates are prepared to perform accounting duties related to the preparation of financial statements; analyze data from a corporation's annual report; prepare income tax returns for individuals, corporations, and partnerships; and assist in management decisions regarding product costing, cost-volume-profit analysis, and cash flows. Graduates may work as staff accountants with various types of organizations.

Accounting Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Math Elective	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
BT	9200	Professional Practices	1	0	1
OT	XXXX	Computer Elective	2	3	3
			12	5	14
SECOND TERM					
MGT	29XX	Management Elective	3	0	3
ACC	9220	Cooperative Education Accounting	1	40	2
			4	40	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Math Elective	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2927	Financial Accounting 2	2	2	3
			13	4	15
FOURTH TERM					
ECO	1512	Microeconomics	3	0	3
ACC	9220	Cooperative Education Accounting	1	40	2
			4	40	5
FIFTH TERM					
MAT	11XX	Math Elective	3	0	3
LAW	1823	Business Law 1	3	0	3
OT	1864	Adv Electronic Spreadsheets (Excel)	2	2	3
ACC	2921	Managerial Accounting	5	0	5
ACC	2922	Computerized Accounting Appl	2	2	3
			15	4	17
SIXTH TERM					
MKT	2901	Principles of Marketing 1	3	0	3
ACC	9220	Cooperative Education Accounting	1	40	2
			4	40	5
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
ACC	2914	Cost Accounting 1	3	0	3
ACC	2917	Federal Taxation 1	3	0	3
ACC	2919	Intermediate Accounting 1	4	0	4
FIN	2960	Business Finance	3	0	3
ACC	XXXX	Accounting Elective	3	0	3
			19	0	19
EIGHTH TERM					
MGT	2989	Customer Service Systems	2	3	3
ACC	9220	Cooperative Education Accounting	1	40	2
			3	43	5
NINTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	1513	Macroeconomics	3	0	3
ACC	1851	Auditing	3	0	3
ACC	2918	Federal Taxation 2	3	0	3
ACC	2920	Intermediate Accounting 2	4	0	4
ACC	XXXX	Accounting Elective	3	0	3
			19	0	19
TENTH TERM					
ACC	9220	Cooperative Education Accounting	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					108

Computer Elective: OT 1850, OT 3064, OT 3068, OT 3076
Math Elective: Minimum of 9 hours from the following:
Business Math: MAT 1121, MAT 1122, MAT 1123
Algebra: MAT 1151 (preferred) or MAT 1124
Statistics: MAT 1111 and MAT 1112, or MAT 1179 and MAT 1113
Calculus: MAT 1152 and MAT 1128
English Elective: ENG 1003, ENG 1010, ENG 1011
Management Elective: MGT 2967 (preferred) or MGT 2965 and MGT 2966
Accounting Elective: ACC 1856, ACC 2915, ACC 2941, ACC 2942, ACC 2943, ACC 2945, ACC 2946, ACC 2947, ACC 2949, ACC 2950

Accounting Certificate (ACCTC)

Advisor: Michele Geers

The Accounting certificate program is designed for individuals who have already earned a degree in a different discipline and want to sit for the CPA exam, or who may need accounting knowledge for job promotion. The curriculum has no cooperative education requirement and is best suited for those currently employed in the accounting field.

Accounting Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ACC	1851	Auditing	3	0	3
ACC	2914	Cost Accounting 1	3	0	3
ACC	2917	Federal Taxation 1	3	0	3
ACC	2918	Federal Taxation 2	3	0	3
ACC	2919	Intermediate Accounting 1	4	0	4
ACC	2920	Intermediate Accounting 2	4	0	4
ACC	2921	Managerial Accounting	5	0	5
ACC	2922	Computerized Accounting Appl	2	2	3
ACC	2926	Financial Accounting 1	3	2	4
ACC	2927	Financial Accounting 2	2	2	3
ACC	XXXX	Accounting Elective	3	0	3
ACC	XXXX	Accounting Elective	3	0	3
			38	6	41
					41

Accounting Electives: Minimum of six credit hours:
ACC 1856, ACC 2915, ACC 2941, ACC 2942, ACC 2943, ACC 2945, ACC 2946, ACC 2947, ACC 2949, ACC 2950

Bookkeeping Certificate (BKC)

Advisor: Michele Geers

The Bookkeeping certificate program is designed for individuals currently working in or returning to an office environment who want to learn additional skill sets to enhance job opportunities. The certificate focuses on bookkeeping, accounting, and computer skills and does not include cooperative education. Students may combine this certificate with an associate's degree in other areas, including Office Management and Medical Administrative Assistant.

Bookkeeping Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ACC	1856	Accounting Information Systems	3	0	3
ACC	2918	Federal Taxation 2	3	0	3
ACC	2921	Managerial Accounting	5	0	5
ACC	2922	Computerized Accounting Appl	2	2	3
ACC	2926	Financial Accounting 1	3	2	4
ACC	2927	Financial Accounting 2	2	2	3
ACC	2945	Payroll Procedures	1	0	1
ACC	2947	Computerized Bookkeeping 1	1	2	2
ACC	2948	Computerized Bookkeeping 2	1	2	2
ACC	2949	State and Local Taxation	1	0	1
ACC	2950	Financial Statement Analysis	2	0	2
ACC	2974	Topics for Bookkeeping	2	0	2
OT	3068	Database Management: Access 1	2	3	3
ACC	XXXX	Accounting Elective	3	0	3
			31	13	37
					37

Accounting Elective: ACC 2914, ACC 2917, ACC 2919, ACC 2942

Automotive Service Management Technology (ASM)

Program Chair: Keith Mains
Co-op Coordinator: Joe Roberts
Advisor: Chuck Butler

The Automotive Service Management Technology program prepares students for entry-level jobs in the technical and/or management areas of the automotive service field. Course materials encompass all Automotive Service Excellence (ASE) certification areas. Hands-on diagnosis and repair of "live" vehicles enhances students' diagnostic skills and builds a solid foundation for a successful and rewarding career. The program includes six terms of classroom/lab study and four terms of cooperative education. Graduates earn an Associate of Applied Business degree and may seek employment as automotive technicians, technician helpers, assistant managers, or specialized technicians.

Automotive Service Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1161	Applied Algebra	3	2	4
ASM	2520	Intro to Automotive Technology	2	3	3
ASM	2525	Engine Fundamentals 1	2	3	3
ASM	2540	Automotive Electrical Diagnosis 1	2	3	3
BT	9200	Professional Practices	1	0	1
			13	11	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1162	Applied Geometry & Trigonometry	3	2	4
OT	185X	Computer Elective	3	2	4
ASM	2530	Engine Performance 1	2	3	3
ASM	2535	Automatic Transmission 1	2	3	3
			13	10	17
THIRD TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
			1	40	2
FOURTH TERM					
ENG	1010	Technical Writing 1	3	0	3
ECO	1512	Microeconomics	3	0	3
ASM	2526	Engine Fundamentals 2	2	3	3
ASM	2541	Automotive Electrical Diagnosis 2	2	3	3
MGT	2967	Introduction to Management	3	0	3
			13	6	15
FIFTH TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
			1	40	2
SIXTH TERM					
LBR	1535	Intro to Labor/Management Relations	3	0	3
ASM	2531	Engine Performance 2	2	3	3
ASM	2542	Automotive Electrical Diagnosis 3	2	3	3
ASM	2550	Manual Transmission and Drive Line 1	2	3	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2924	Acct for Non-Financial Managers	3	0	3
			15	9	18
SEVENTH TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
			1	40	2
EIGHTH TERM					
COMM	102X	Communication Elective	3	0	3
LAW	1823	Business Law 1	3	0	3
ASM	2545	Advanced Electrical/Hydraulics/Safety	2	3	3
ASM	2555	Braking Systems	2	3	3
ASM	2560	Suspension and Steering	2	3	3
ASM	25XX	Technical Elective	2	3	3
			14	12	18
NINTH TERM					
ASM	9221	Cooperative Education-Automotive Service Management	1	40	2
			1	40	2
TENTH TERM					
ASM	2532	Engine Performance 3	2	3	3
ASM	2570	Air Conditioning & Heating	2	3	3
ASM	25XX	Technical Elective	2	3	3
MGT	2989	Customer Service Systems	2	3	3
BUS	9233	Business Competencies	2	0	2
XXX	XXXX	Social Science Elective	3	0	3
			13	12	17
					110

Technical Electives: ASM 2565, ASM 2527, ASM 2533, ASM 2536, ASM 2544, ASM 2551, ASM 2561
Computer Elective: OT 1850, OT 1863
Social Science Elective: Any PSY, SOC, ECO, GEO, HST, LBR, POL
Communication Elective: COMM 1020, COMM 1023, COMM 1024

Automotive Service Technician Certificate (ASTC)

Advisor: Chuck Butler

The Automotive Service Technician certificate program prepares students for entry-level jobs in the technical areas of the automotive service field. Hands-on diagnosis and repair of "live" vehicles enhance students' diagnostic skills and builds a solid foundation for a career in automotive service.

Automotive Service Technician Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ASM	2520	Intro to Automotive Technology	2	3	3

ASM	2525	Engine Fundamentals 1	2	3	3
ASM	2526	Engine Fundamentals 2	2	3	3
ASM	2530	Engine Performance 1	2	3	3
ASM	2531	Engine Performance 2	2	3	3
ASM	2532	Engine Performance 3	2	3	3
ASM	2534	Basic Driveline Service and Repair	2	3	3
ASM	2540	Automotive Electrical Diagnosis 1	2	3	3
ASM	2541	Automotive Electrical Diagnosis 2	2	3	3
ASM	2555	Braking Systems	2	3	3
ASM	2560	Suspension and Steering	2	3	3
ASM	2570	Air Conditioning & Heating	2	3	3
ASM	25XX	Automotive Elective	2	3	3
			26	39	39
					39

Automotive Elective: ASM 2542, ASM 2561, ASM 2565, ASM 2599

Management/Marketing Technologies

Business Management Technology (BM)

Program Co-Chairs: Carolyn Waits, Jim Wood
Co-op Coordinator: Jim Macke
Advisors: Paul Callahan, Michael Chikeleze, Meg Clark, Alicia Revely, Carolyn Waits, Sharon White, Jim Wood

The Business Management program is a two-year Associate of Applied Business degree program. It includes five paid cooperative education terms where students gain valuable insight and real world experience in assessing and solving business management challenges. The Business Management curriculum includes contemporary practices in management, marketing, human resources, accounting, and organizational development. Students learn the effective utilization of time, money, materials, and people to improve business.

Graduates of the Business Management program are prepared to manage business at the entry level in the four functional areas of management (planning, leading, organizing, and controlling), to enter management training, or to assume a team leadership role.

Business Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
MGT	2965	Principles of Management 1	3	0	3
BT	9200	Professional Practices	1	0	1
OT	XXXX	Computer Elective	2	3	3
			15	3	16
SECOND TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
COMM	102X	Communication Elective	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
LAW	1823	Business Law 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
			18	2	19
FOURTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
FIFTH TERM					
MAT	11XX	Mathematics Elective	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
MKT	2902	Principles of Marketing 2	3	0	3
ACC	2927	Financial Accounting 2	2	2	3
MGT	2966	Principles of Management 2	3	0	3
XXX	XXXX	Business Elective	3	0	3
			16	4	18
SIXTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
MKT	1810	Principles of Sales	3	0	3
MGT	1832	Human Resource Management	3	0	3
ACC	2921	Managerial Accounting	5	0	5
FIN	2960	Business Finance	3	0	3
MGT	2996	Project Management	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
			23	0	23
EIGHTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
NINTH TERM					
LAW	1824	Business Law 2	3	0	3
ACC	2950	Financial Statement Analysis	2	0	2
MGT	2970	Contemporary Leadership	3	0	3
MGT	2975	Business Management Seminar	2	3	3
MGT	2988	Quality Management	3	0	3
MGT	2989	Customer Service Systems	3	0	3
BUS	9233	Business Competencies	2	0	2
XXX	XXXX	Social Science Elective	3	0	3
			21	3	22
TENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
					108

Computer Elective: OT 1850, OT 3036, OT 3058, OT 3064, OT 3068, OT 1864
Math Electives: Minimum of 9 credit hours: MAT 1121, MAT 1122, MAT 1123 or MAT 1151, MAT 1111, MAT 1112
English Elective: ENG 1003, ENG 1011
Business Elective: FIN 1804, FIN 2961, MKT 1873, MGT 2904, MGT 2905, MGT 2906, MGT 2907, MGT 2908, MKT 2909, MGT, 2910, BUS 2973, MGT 2971, MKT 2990, ITM 2980, RE 2958
Communication Elective: COMM 1020, COMM 1024
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, PSY 1504, LBR 1535, any POL
Economics Elective: ECO 1512, ECO 1513

Business Financial Services Technology (BFS)

Program Co-Chairs: Carolyn Waits, Jim Wood
Co-op Coordinator: Jim Macke
Advisor: Meg Clark

Finance is the study of how individuals, institutions, and businesses acquire, spend, and manage money and other financial resources. Almost every firm, government agency, and organization has one or more financial managers who oversee the preparation of financial reports, direct investment activities, and carry out cash management strategies.

The Business Financial Services program is a two-year program in which students may earn an Associate of Applied Business degree. The program provides a combination of sound financial business training and on-the-job experience. The program offers courses that cover basic corporate financial concepts, investment concepts, personal financial planning, and insurance planning. This program prepares students for jobs in service and industrial companies as well as financial institutions. These jobs might include: financial

analyst, pricing analyst, cash manager, credit analyst, loan officer, security trader, or financial customer service representative.

Business Financial Services Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
ECO	1512	Microeconomics	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
MGT	2965	Principles of Management 1	3	0	3
BT	9200	Professional Practices	1	0	1
OT	XXXX	Computer Elective	2	3	3
			18	5	20
SECOND TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
LAW	1823	Business Law 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2927	Financial Accounting 2	2	2	3
FIN	2961	Personal Finance	3	0	3
			17	2	18
FOURTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
FIFTH TERM					
ENG	10XX	English Elective	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
FIN	1804	Risk & Insurance	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
RE	2958	Real Estate Investing	3	0	3
FIN	2960	Business Finance	3	0	3
MGT	2966	Principles of Management 2	3	0	3
			20	2	21
SIXTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
SEVENTH TERM					
MKT	1810	Principles of Sales	3	0	3
LAW	1824	Business Law 2	3	0	3
OT	1864	Adv Electronic Spreadsheets (Excel)	2	2	3
ACC	2950	Financial Statement Analysis	2	0	2
FIN	2962	Principles of Investments 1	3	0	3
MGT	2989	Customer Service Systems	3	0	3
XXX	XXXX	Business Elective	3	0	3
			19	2	20
EIGHTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
NINTH TERM					
COMM	102X	Communication Elective	3	0	3
ECO	1513	Macroeconomics	3	0	3
FIN	2968	Principles of Investments 2	3	0	3
MGT	2975	Business Management Seminar	2	3	3
FIN	2976	Financial Institutions	3	0	3
BUS	9233	Business Competencies	2	0	2
XXX	XXXX	Social Science Elective	3	0	3
			19	3	20
TENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
					109

Computer Elective: OT 1850, OT 3036, OT 3058, OT 3064, OT 3068
Math Electives: Minimum of 9 credit hours; MAT 1121, MAT 1122, MAT 1123 or MAT 1151, MAT 1111, MAT 1112
Business Elective: MGT 2971, MGT 2988, BUS 2973, ACC 2921, MKT 2902, MKT 2990
English Elective: ENG 1003, ENG 1011
Communication Elective: COMM 1020, COMM 1024
Social Science Elective: PSY 1502, PSY 1504, PSY 1505, SOC 1521, LBR 1535, any POL

International Trade Management Technology (ITM)

Program Co-Chairs: Carolyn Waits, Jim Wood
Co-op Coordinator: Paul Callahan
Advisor: Paul Callahan

The International Trade Management curriculum provides a strong general business foundation and coursework in international concerns. Throughout the program students participate in a variety of applied instructional activities. Students work on individual and group country profile projects dealing with market entry, product, pricing, promotion, distribution, and export and import documentation along with international case studies and extensive use of the Internet for research.

Students who complete this program are prepared to work in international freight forwarding and logistics, customer service, and sales. Graduates earn an Associate of Applied Business degree. To enhance employability, advisors encourage students to take the courses required to complete an additional Associate of Applied Business degree program in Management, Marketing, or Finance.

International Trade Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
ITM	2980	Introduction to International Business	3	0	3
BT	9200	Professional Practices	1	0	1
XXX	XXXX	Foreign Language Elective 1	4	0	4
OT	XXXX	Computer Elective	2	3	3
			19	3	20
SECOND TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
MKT	1880	Logistics and Transportation Strategies	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
XXX	XXXX	Foreign Language Elective 2	4	0	4
			19	0	19
FOURTH TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
			1	40	2
FIFTH TERM					
MAT	11XX	Mathematics Elective	3	0	3
MKT	1810	Principles of Sales	3	0	3
MKT	2902	Principles of Marketing 2	3	0	3
ITM	2981	International Marketing	3	0	3
XXX	XXXX	Foreign Language Elective 3	4	0	4
			16	0	16
SIXTH TERM					
ITM	9252	Cooperative Education			

		International Trade Management	1	40	2
			1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
GEO	155X	Geography Elective	3	0	3
LAW	1823	Business Law 1	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
MGT	2966	Principles of Management 2	3	0	3
ITM	2983	Import and Export Essentials	4	0	4
XXX	XXXX	Social Science Elective	3	0	3
			22	2	23
EIGHTH TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
			1	40	2
NINTH TERM					
COMM	102X	Communication Elective	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2927	Financial Accounting 2	2	2	3
ACC	2950	Financial Statement Analysis	2	0	2
MGT	2989	Customer Service Systems	3	0	3
MGT	2996	Project Management	3	0	3
BUS	9233	Business Competencies	2	0	2
			17	4	19
TENTH TERM					
ITM	9252	Cooperative Education International Trade Management	1	40	2
			1	40	2
					109

Computer Elective: OT 1850, OT 3036, OT 3058, OT 3064, OT 3068, OT 1864
Math Electives: Minimum of 9 credit hours: MAT 1121, MAT 1122, MAT 1123 or MAT 1151, MAT 1111, MAT 1112
English Elective: ENG 1003, ENG 1011
Communication Elective: COMM 1020, COMM 1024
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, PSY 1504, LBR 1535, any POL
Economics Elective: ECO 1512, ECO 1513
Geography Elective: GEO 1551, GEO 1552, GEO 1553
Foreign Language Elective: any combination of three: FRN 1060, FRN 1061, FRN 1062, FRN 1063, FRN 1064, FRN 1065, SPN 1080, SPN 1081, SPN 1082, SPN 1083, SPN 1084, SPN 1085

Marketing Management Technology (MMT)

Program Co-Chairs: Carolyn Waits, Jim Wood
Co-op Coordinator: Jim Macke
Advisors: Alicia Revely, Jim Wood

Marketing encompasses the activities through which businesses satisfy customer needs to earn profits for the organization. Marketing Management Technology is a two-year program in which students may earn an Associate of Applied Business degree. The program teaches students to deal with the four fundamentals of marketing: product, promotion, price, and place as well as the fundamental personal, interpersonal, conceptual, and technical skills to manage organizational operations. This program prepares students for jobs providing sales leadership, managing retail operations, developing promotional activities, or overseeing distribution.

Marketing Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
LAW	1823	Business Law 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
BT	9200	Professional Practices	1	0	1
OT	XXXX	Computer Elective	2	3	3
			18	3	19
SECOND TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
COMM	102X	Communication Elective	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
MKT	2901	Principles of Marketing 1	3	0	3
MGT	2966	Principles of Management 2	3	0	3
			17	2	18
FOURTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
FIFTH TERM					
MAT	11XX	Mathematics Elective	3	0	3
MKT	1810	Principles of Sales	3	0	3
MKT	1844	Principles of Advertising	3	0	3
MKT	2902	Principles of Marketing 2	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
ITM	2981	International Marketing	3	0	3
			18	2	19
SIXTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
SEVENTH TERM					
ACC	2927	Financial Accounting 2	2	2	3
FIN	2960	Business Finance	3	0	3
MGT	2970	Contemporary Leadership	3	0	3
MKT	2997	Marketing Research	3	0	3
XXX	XXXX	Business Elective	3	0	3
XXX	XXXX	Business Elective	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
			23	2	24
EIGHTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
NINTH TERM					
ACC	2950	Financial Statement Analysis	2	0	2
MGT	2975	Business Management Seminar	2	3	3
MGT	2989	Customer Service Systems	3	0	3
MGT	2996	Project Management	3	0	3
MKT	2998	Direct Marketing	3	0	3
BUS	9233	Business Competencies	2	0	2
XXX	XXXX	Social Science Elective	3	0	3
			18	3	19
TENTH TERM					
BUS	9222	Cooperative Education Business Management/ Marketing Management	1	40	2
			1	40	2
					109

Computer Elective: OT 1850, OT 3036, OT 3058, OT 3064, OT 3068, OT 1864
Math Electives: Minimum of 9 credit hours: MAT 1121, MAT 1122, MAT 1123 or MAT 1151, MAT 1111, MAT 1112
English Elective: ENG 1003, ENG 1011
Communication Elective: COMM 1020, COMM 1024
Economics Elective: ECO 1512, ECO 1513
Business Elective: MKT 1880, MGT 2971, MGT 2988, MKT 2990, LAW 1824, FIN 2961, BUS 2973, ITM 2980, RE 2958
Social Science Elective: PSY 1502, PSY 1505, SOC 1521, PSY 1504, LBR 1535, any POL

Management of Technology (TMGT)

Program Co-Chairs: Carolyn Waits, Jim Wood
Co-op Coordinator: Adam Waits
Advisors: Sharon White

Information systems have transformed the way business is conducted. Those who understand the power of leveraging technology in business can create their own competitive advantage. The Management of Technology curriculum provides business students the knowledge and skills required to effectively design and deploy IT-based business solutions. The program provides students with a solid background in information systems analysis and development, along with skills in leadership, project management, and understanding the impact of technology. Graduates earn an Associate of Applied Business degree, and are qualified for positions as business strategist/analyst, business operational specialist, project manager, and technology marketing manager. Upon completion of the program, students should have the necessary classes needed to take the PMI test.

Management of Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BT	9200	Professional Practices	1	0	1
BUS	2973	Business Ethics	3	0	3
ENG	1001	English Composition 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
OT	1850	Intro to Computer Applications	3	2	4
			13	2	14
SECOND TERM					
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
TMGT	9218	Cooperative Education Technology Management	1	40	2
			3	42	5
THIRD TERM					
ACC	2926	Financial Accounting 1	3	2	4
ENG	1002	English Composition 2	3	0	3
IT	5201	Information Technology Concepts	2	3	3
MAT	11XX	Math Elective	4	0	4
MGT	2966	Principles of Management 2	3	0	3
			15	5	17
FOURTH TERM					
IT	XXXX	Technology Elective	2	3	3
TMGT	9218	Cooperative Education Technology Management	1	40	2
			3	43	5
FIFTH TERM					
XXX	XXXX	Math Elective	3	0	3
ACC	2927	Financial Accounting 2	2	2	3
IT	XXXX	Technology Elective	2	3	3
LAW	1823	Business Law 1	3	0	3
MGT	2996	Project Management	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
			16	5	18
SIXTH TERM					
OT	3036	Project Management Applications	2	3	3
TMGT	9218	Cooperative Education Technology Management	1	40	2
			3	43	5
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	15XX	Economics Elective	3	0	3
IT	5320	Database Design and SQL	2	3	3
IT	XXXX	Technology Elective	3	2	3
MKT	2901	Principles of Marketing 1	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
			17	5	18
EIGHTH TERM					
IT	XXXX	Technology Elective	3	2	3
TMGT	9218	Cooperative Education Technology Management	1	40	2
			4	42	5
NINTH TERM					
ACC	2950	Financial Statement Analysis	2	0	2
ENG	1010	Technical Writing 1	3	0	3
IT	XXXX	Technology Elective	3	2	3
MGT	2970	Contemporary Leadership	3	0	3
MGT	2989	Customer Service Systems	3	0	3
TMGT	2920	Technology Management Design Project	3	2	4
			17	4	18
TENTH TERM					
BUS	9233	Business Competencies	2	0	2
TMGT	9218	Cooperative Education Technology Management	1	40	2
			3	40	4
					109

Math Elective: Minimum of 8 hours from the following: MAT 1121, MAT 1122 and MAT 1123 or MAT 1151, MAT 1111 (preferred), MAT 1112, MAT 1113, MAT 1152, MAT 1128, MAT 1191.
Social Science Electives: choose two courses from the following areas: ECO, HST, PSY, SOC, POL.
Economics Elective: ECO 1512, ECO 1513.
Technology Elective: Choose five courses from the IT area.

Entrepreneurship Certificate (ETRPC)

Program Co-Chairs: Carolyn Waits, Jim Wood
Advisor: Jim Wood

The Entrepreneurship certificate serves individuals who are interested in learning the essentials of starting a successful home-based business or small company. Students in the Entrepreneurship certificate program learn to select the right business, set up a profitable enterprise, get business coming quickly and steadily, operate a business productively using technology, and create a customer-focused company.

Entrepreneurship Certificate

			Hours Per Week Class	Lab	Credit Hours
MKT	1810	Principles of Sales	3	0	3
OT	1850	Intro to Computer Applications	3	2	4
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2926	Financial Accounting 1	3	2	4
ACC	2947	Computerized Bookkeeping 1	1	2	2
MGT	2971	Small Business Start-Up 1	3	0	3
MGT	2972	Small Business Start-Up 2	3	0	3
MGT	2989	Customer Service Systems	2	3	3
MKT	2990	Entrepreneurial Marketing	3	0	3
			23	11	28
					28

Human Resource Management Certificate (HRC)

Program Co-Chairs: Carolyn Waits, Jim Wood
Advisor: Carolyn Waits

The Human Resource Management certificate is designed for students interested in the increasingly specialized field of human resource management and for professionals who have moved into human resource management from other functional areas of their organizations. The certificate provides students with specific knowledge and skills in employment law, employee compensation plans, employee benefits plans, and continuous quality improvement.

This program is designed to prepare graduates to earn the Certified Employee Benefits Specialist (CEBS) and GBA1 (Employee Benefits: Concepts & Health Care Benefits) certifications.

Students earning an associate's degree in a management area may

choose to add the Human Resource Management certificate to enhance their studies.

Human Resource Management Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
COMM	1020	Public Speaking	3	0	3
LBR	1535	Intro to Labor/Management Relations	3	0	3
LBR	1539	Introduction to Employment and Workplace Law 1	3	0	3
LBR	1540	Introduction to Employment and Workplace Law 2	3	0	3
LAW	1823	Business Law 1	3	0	3
MGT	1832	Human Resource Management	3	0	3
MGT	1833	Compensation Management	3	0	3
MGT	1834	Employee Benefits	3	0	3
MGT	2965	Principles of Management 1	3	0	3
MGT	2966	Principles of Management 2	3	0	3
MGT	2996	Project Management	3	0	3
MGT	3118	Training Delivery and Facilitation	3	0	3
MGT	3119	Staffing and Talent Mgmt	3	0	3
ACC	2924	Acct for Non-Financial Managers	3	0	3
OT	3094	Human Resource Management	3	0	3
			45	0	45
					45

Paralegal Certificate (PAC)

Program Co-Chairs: Carolyn Waits, Jim Wood
Advisor: Michael Chikeleze

The Paralegal certificate program prepares students for careers in the legal profession in three key employment areas: employees of attorneys (the dominant category), self-employed individuals who work for attorneys, and self-employed individuals who provide their services directly to the public with attorney supervision. Students learn substantive and procedural law, concentrating on the most prevalent areas of a legal practice, such as domestic relations, as well as general civil and criminal litigation practice. They become proficient at legal research, document drafting, and persuasive writing.

Paralegal Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
LAW	1823	Business Law 1	3	0	3
OT	3016	Introduction to Legal Environment	3	0	3
OT	3058	Microsoft Word for Windows	2	3	3
			8	3	9
SECOND TERM					
LAW	1824	Business Law 2	3	0	3
LAW	1829	Litigation 1	3	0	3
			6	0	6
THIRD TERM					
LAW	1830	Legal Research 1	3	0	3
LAW	1832	Litigation 2	3	0	3
LAW	1838	Legal Ethics	3	0	3
			9	0	9
FOURTH TERM					
LAW	1828	Family Law	3	0	3
LAW	1831	Legal Research 2	3	0	3
			6	0	6
FIFTH TERM					
OT	3017	Legal Formatting	2	3	3
XXX	XXXX	Technical Elective	3	0	3
XXX	XXXX	Technical Elective	3	0	3
			8	3	9
SIXTH TERM					
XXX	XXXX	Technical Elective	3	0	3
			3	0	3
					42

Technical Electives: LAW 1825, LAW 1827, LAW 1839, LAW 1875, RE 2953, LBR 1539, LBR 1540, OT 3002, OT 3003, OT 3019, OT 3068, OT 3069, OT 3074, CRJ 1250, CRJ 1253, CRJ 1254, CRJ 1255, CRJ 1256, CRJ 1257.

Graphic Communications Technologies

Program Chair: Gary Walton
Co-op Coordinator: Joe Roberts
Advisor: Kathleen Freed

The Graphic Communications Technologies programs provide competencies for success in the graphics and printing industry. Programs leading to Associate of Applied Business degrees are available for Graphics Imaging. Degree programs require cooperative education experience.

Graphics Imaging Technology (GIT)

The Graphics Imaging Technology curriculum provides students with a background in creating graphic images on a printing press from concept to final production. Students gain an overview of all facets of the industry including design, graphics software, digital photography, customer service, sales, management, estimating, and printing processes.

Students may earn a two-year Associate of Applied Business degree that combines classroom coursework, labs, and co-op employment with an area employer. Students receive in-depth training on Macintosh and Windows-based computers using the industry's leading graphics software. They learn to produce jobs on a variety of printing presses such as sheet-fed offset, digital, flexographic, screen, and letterpress. Lecture topics include training in estimating, selecting ink and paper, and printing processes emphasizing offset press technology.

Graphics Imaging Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
GC	1480	Digital Photography & Imaging 1	1	4	3
OT	1850	Introduction to Computer Applications	3	2	4
BT	9200	Professional Practices	1	0	1
			12	12	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
GC	1419	Survey of Printing Inks	3	0	3
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1490	Digital Photography & Imaging 2	1	4	3
ECO	1512	Microeconomics	3	0	3
			15	7	18
THIRD TERM					
ENG	10XX	English Elective	3	0	3
GC	9223	Cooperative Education - Graphics	1	40	2
			4	40	5
FOURTH TERM					
GC	1430	Label and Packaging Presswork 1	1	7	4
GC	1439	Introduction to Offset Presswork	1	4	3
GC	1449	Printing Estimating 1	2	3	3
GC	1481	Computer Graphics for Printing 3	2	3	3
MKT	2901	Principles of Marketing 1	3	0	3
			9	17	16

FIFTH TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
GC	9223	Cooperative Education - Graphics	1	40	2
			4	40	5
SIXTH TERM					
GC	1440	Offset Presswork	3	9	6
GC	1450	Printing Estimating 2	2	3	3
GC	1451	Print Media Workflow	2	3	3
GC	1483	Computer Graphics for Printing 4	2	3	3
MGT	2967	Introduction to Management	3	0	3
			12	18	18
SEVENTH TERM					
GC	1423	Adobe InDesign	2	3	3
GC	9223	Cooperative Education - Graphics	1	40	2
			3	43	5
EIGHTH TERM					
COMM	102X	Communication Elective	3	0	3
GC	1429	Screen Printing	2	5	3
LAW	1823	Business Law 1	3	0	3
MGT	2989	Customer Service Systems	3	0	3
ACC	29XX	Accounting Elective	3	0	3
			14	5	15
NINTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
XXX	XXXX	Social Science Elective	3	0	3
			4	40	5
TENTH TERM					
GC	9223	Cooperative Education - Graphics	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					108

Communication Elective: COMM 1020, COMM 1023, COMM 1024.
Social Science Elective: Any PSY, ECO, SOC, LBR, HST, GEO, POL, ART, CULT, FRN, SPN, LIT, MUS, PHI, THE.
English Elective: ENG 1003, ENG 1010, ENG 1011.
Accounting Elective: ACC 2924 or ACC 2926.

Advertising Design Certificate (ADC)

The Advertising Design certificate trains students to help businesses maximize their return on advertising investments. Students in the Advertising Design program learn to generate ideas, manipulate images, and use various design methods to create effective advertising. Students learn how to pinpoint targeted prospects cost-effectively, use advertising to generate a constant stream of inquiries, and convert a high proportion of prospects into clients/customers. Students learn computer design, digital camera processes, concept development, communication techniques, and presentation skills. Graduates master the entire advertising process, from research to developing creative objectives for various advertising and promotional strategies. Advertising Design graduates find career placement in advertising agencies and major industries.

Advertising Design Certificate

All certificate-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
MKT	2901	Principles of Marketing 1	3	0	3
			7	6	9
SECOND TERM					
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1480	Digital Photography & Imaging 1	1	4	3
MKT	2902	Principles of Marketing 2	3	0	3
			6	7	9
THIRD TERM					
GC	1481	Computer Graphics for Printing 3	2	3	3
ART	1692	Design 1	2	3	3
MKT	1844	Principles of Advertising	3	0	3
			7	6	9
FOURTH TERM					
GC	1423	Adobe InDesign	2	3	3
GC	1483	Computer Graphics for Printing 4	2	3	3
MKT	1873	E-Commerce Business Strategy	2	2	3
			6	8	9
FIFTH TERM					
MKT	1810	Principles of Sales	3	0	3
MKT	1878	Internet Advertising	2	2	3
MGT	2989	Customer Service Systems	3	0	3
			8	2	9
SIXTH TERM					
COMM	10XX	Communications Elective	3	0	3
GC	1484	Commercial Portfolio Production	1	0	1
MKT	2990	Entrepreneurial Marketing	3	0	3
			7	0	7
					52

Communication Elective: COMM 1020, COMM 1022, COMM 1023, COMM 1024, COMM 1027.

Production Artist Certificate (PDAC)

The Production Artist certificate provides the skills to prepare design for print media using graphic software and printing processes and techniques. The program emphasizes design skills, using several types of printing presses, and issues with color reproduction and basic and digital photography techniques.

Production Artist Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
GC	1403	Computer Graphics for Printing 1	2	3	3
GC	1415	Graphic Arts Processes	2	3	3
GC	1419	Survey of Printing Inks	3	0	3
ART	1685	Introduction to Photography	2	3	3
			9	9	12
SECOND TERM					
GC	1421	Computer Graphics for Printing 2	2	3	3
GC	1426	Packaging and Advertising Processes	3	0	3
GC	1480	Digital Photography & Imaging 1	1	4	3
			6	7	9
THIRD TERM					
GC	1423	Adobe InDesign	2	3	3
GC	1429	Screen Printing	2	6	4
GC	1449	Printing Estimating 1	2	3	3
			6	12	10
FOURTH TERM					
GC	1430	Label and Packaging Presswork 1	1	7	4
GC	1439	Introduction to Offset Presswork	1	4	3
GC	1481	Computer Graphics for Printing 3	2	3	3
			4	14	10
FIFTH TERM					
GC	1483	Computer Graphics for Printing 4	2	3	3
GC	1490	Digital Photography & Imaging 2	1	4	3
MGT	2989	Customer Service Systems	3	0	3
			6	7	9
					50

Hospitality Management Technologies

Program Chair: Jeff Sheldon
Laura Horn, MEd, RD, LD (Dietetic Technology only)
Co-op Coordinators: Kelly Harper
Advisors: Meg Galvin, Pat Huller, John Kinsella, Paula Kirch Smith, Donna Lapasky, Betsy Lasorella, Jim Myatt, Alan Neace

The Hospitality Management Technologies programs provide knowledge and skills for a range of positions in food service, lodging, and health care. Degree programs are available for Culinary Arts, Dietetic Technician, Hospitality Management, and Pastry Arts. These programs, except Dietetic Technician, require cooperative education experience. In addition, certificates in Culinary Arts, Pastry Arts, Personal Chef, Event Management, and Dietary Management are available. All programs include professional management courses certified by the National Restaurant Association.

Culinary Arts Technology (CUL)

In the Culinary Arts Technology program, students receive training in all aspects of food preparation including methods of cookery, sauces, soups, butchery, garde manger, pastry, and confectionaries, in addition to culinary management. This program is accredited by the American Culinary Federation Foundation. Graduates earn an Associate of Applied Business degree and are prepared for employment in hotels, restaurants, clubs, resorts, catering, and health care food service operations.

Culinary Arts Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BT	9200	Professional Practices	1	0	1
CUL	3601	Cooking 1 - Skills Development	0	6	2
ENG	1001	English Composition 1	3	0	3
HRM	3630	Survey of Hospitality Careers	2	0	2
HRM	3631	Food Service Sanitation	2	0	2
MAT	1108	Math for Food Service	1	2	2
OT	XXXX	Computer Elective	2	3	3
			11	11	15
SECOND TERM					
XXX	XXXX	Social Science Elective	3	0	3
CUL	3602	Cooking 2 - Stock Sauces, Soup	0	6	2
CUL	3611	Baking for Restaurants 1	0	6	2
ENG	1002	English Composition 2	3	0	3
HRM	3632	Food & Beverage Cost Control 1	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
			12	12	16
THIRD TERM					
HOSP	9224	Cooperative Education - Hospitality Technologies	1	40	2
			1	40	2
FOURTH TERM					
CUL	3603	Cooking 3 - Meat, Fish, Poultry	0	6	2
CUL	3612	Baking for Restaurants 2	0	6	2
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
ENG	10XX	English Elective	3	0	3
HRM	3633	Food & Beverage Cost Control 2	3	0	3
LAW	1825	Hospitality Law	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
			15	12	19
FIFTH TERM					
HOSP	9224	Cooperative Education - Hospitality Technologies	1	40	2
			1	40	2
SIXTH TERM					
ACC	2924	Acct for Non-Financial Mangers	3	0	3
COMM	1020	Public Speaking	3	0	3
CUL	3604	Cooking 4: Restaurant Cooking	0	6	2
CUL	3605	Cooking 5: Butchery and Fish Mongering	1	3	2
CUL	3606	Cooking 6: Nutritional Cooking	0	6	2
HRM	3634	Dining Room Service 1	0	6	2
HRM	3636	Hospitality Sales and Marketing	3	0	3
			10	21	17
SEVENTH TERM					
HOSP	9224	Cooperative Education - Hospitality Technologies	1	40	2
			1	40	2
EIGHTH TERM					
XXX	XXXX	Social Science Elective	3	0	3
CUL	3607	Cooking 7: Garde Manger	0	9	3
CUL	3608	Cooking 8: International Cuisine	0	9	3
ECO	XXXX	Economics Elective	3	0	3
HRM	3635	Food and Beverage Supervision	3	0	3
MGT	2989	Customer Service Systems	3	0	3
			12	18	18
NINTH TERM					
HOSP	9224	Cooperative Education - Hospitality Technologies	1	40	2
			1	40	2
TENTH TERM					
BUS	9233	Business Competencies	2	0	2
CUL	3609	Cooking 9: Banquets	0	9	3
CUL	3610	Cooking 10: Advanced Restaurant Cooking	0	9	3
HRM	3638	Beverage Management and Mixology	0	6	2
HRM	3640	Dining room Service 2	0	6	2
			2	30	12
					105

Math Electives: MAT 1121 and MAT 1122 (no transfer); or MAT 1151 and MAT 1152; or MAT 1124 and MAT 1111 and MAT 1112 English Elective: ENG 1003, ENG 1010, ENG 1011 Social Science Elective: Any ECO, PSY, SOC, LBR, HST, GEO, ART, MUS, LIT, PHI, POL Economics Elective: ECO 1512, ECO 1513, ECO 1514 Computer Elective: OT 1850, OT 1863, OT 3058.

Culinary Arts Certificate (CAC)

The Culinary Arts certificate program provides a combination of courses in food preparation and culinary management. Students prepare for a variety of positions in the food service industry. This one-year evening program includes courses required for individual certification with the American Culinary Federation Foundation.

Culinary Arts Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CUL	3601	Cooking 1 - Skills Development	0	6	2
HRM	3631	Food Service Sanitation	2	0	2
			2	6	4
SECOND TERM					
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
CUL	3602	Cooking 2 - Stock Sauces, Soup	0	6	2
			3	6	5
THIRD TERM					
CUL	3603	Cooking 3 - Meat, Fish, Poultry	0	6	2
CUL	3611	Baking for Restaurants 1	0	6	2
			0	12	4
FOURTH TERM					
HRM	3632	Food & Beverage Cost Control 1	3	0	3
XXX	36XX	Culinary Elective	0	6	2
			3	6	5
					18

Culinary Elective: CUL 3612, CUL 3604, CUL 3606, HRM 3635

Dietetic Technology (DT)

Dietetic Technology includes courses in foods, nutrition, food service management, and a range of general science courses. Graduates of Dietetic Technology earn an Associate of Applied Science degree. Students prepare for positions in health care, business and industry, public health, food service, and research. Dietetic technicians work independently or in teams with registered dietitians and are an integral part of health care and food service management teams.

The Dietetic Technology program is accredited by the Commission on Accreditation for Dietetics Education of the American Dietetic Association. Students complete 463 hours of supervised practice experience in various community programs, health care, and food service facilities. Students also complete an additional 55 hours to include professional practice, food shows, professional development seminars, volunteer and community service. Successful completion of the program qualifies students to take the registration exam given by the Commission on Dietetic Registration. For complete details of the program including cost, please contact the program chair.

Dietetic Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
DT	1211	Human Resources in Dietetics	2	0	2
CHE	2236	Physiological Chemistry	3	3	4
BT	9200	Professional Practices	1	0	1
			12	3	13
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
DT	1201	Dietetics Professional Practice	1	0	1
DT	1203	Cooking for a Healthy Lifestyle	1	3	2
DT	1204	Nutrition for the Life Cycle	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
			11	5	13
THIRD TERM					
DT	1205	Nutrition Assessment 1	1	2	2
DT	1206	Community Nutrition	2	0	2
DT	1230	Dietetic Directed Practice - Lifespan	0	5	1
BIO	4015	Anatomy and Physiology 2	3	2	4
MCH	4806	Medical Terminology 1	3	0	3
			9	9	12
FOURTH TERM					
MAT	1108	Math for Food Service	1	2	2
DT	1231	Dietetic Directed Practice - Health Care	0	5	1
DT	1240	Nutrition Assessment 2	3	0	3
HRM	3631	Food Service Sanitation	2	0	2
BIO	4016	Anatomy and Physiology 3	3	2	4
			9	9	12
FIFTH TERM					
COMM	102X	Communication Elective	3	0	3
ECO	15XX	Economics Elective	3	0	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
OT	XXXX	Computer Elective	2	2	3
			11	2	12
SIXTH TERM					
ENG	10XX	English Elective	3	0	3
DT	1241	Medical Nutrition Therapy 1	2	2	3
DT	1250	Dietetic Technician Directed Practice - MNT 1	0	5	1
CUL	3601	Cooking 1 - Skills Development	0	6	2
HRM	3632	Food & Beverage Cost Control 1	3	0	3
			8	13	12
SEVENTH TERM					
DT	1207	Food and Culture	1	4	3
DT	1210	Quantity Food Production	2	6	4
DT	1242	Medical Nutrition Therapy 2	2	2	3
DT	1251	Dietetic Technician Directed Practice - MNT 2	0	10	2
HRM	3635	Food & Beverage Supervision	3	0	3
			8	22	15
EIGHTH TERM					
DT	1208	Food Systems Management 1	2	0	2
DT	1232	Dietetic Management Practicum	0	7	1
DT	1243	Medical Nutrition Therapy 3	2	2	3
DT	1252	Dietetic Technician Directed Practice - MNT 3	0	5	1
XXX	XXXX	Technical Elective	2	0	2
XXX	XXXX	Social Science Elective	3	0	3
			9	14	12
NINTH TERM					
DT	1209	Food Systems Management 2	2	0	2
DT	1233	Dietetic Food Service Practicum	0	7	1
DT	1244	Dietetic Technician Seminar	1	0	1
DT	1245	Dietetic Technician Exam Preparation	2	0	2
DT	1253	Dietetic Technician Clinical Practicum	0	7	1
BUS	9233	Business Competencies	2	0	2
			7	14	9
					110

Social Science Elective: Any ECO, CULT, GEO, HST, LBR, PSY, SOC, ART, MUS, LIT, PHI, POL
Communication Elective: COMM 1020, COMM 1023, COMM 1024, COMM 1027
English Elective: ENG 1003, ENG 1010, ENG 1011
Economics Elective: ECO 1512, ECO 1513
Computer Elective: OT 1850, OT 1863, OT 3058
Technical Elective: MGT 2989, HRM 3633, HRM 3636, DT 1299, MCH 4807, HFT 4163.

Dietary Management Certificate (DMC)

The Dietary Management certificate program provides courses in food service management, nutrition, sanitation, and human resources. Graduates may work as food service operations managers for health care, schools, and other non-commercial food service settings. Dietary managers work in teams with registered dietitians and are an integral part of health care and food service management teams.

The program is approved by the Dietary Managers Association. Students complete 216 hours of field experience in various community programs, health care, and food service facilities. Successful completion of the program qualifies students to take the two-part competency exam for certification through the Certifying Board for Dietary Managers. For complete details of the program including cost, please contact the program chair.

Dietary Management Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
DT	1211	Human Resources in Dietetics	2	0	2
BT	9200	Professional Practices	1	0	1
			6	0	6
SECOND TERM					
MAT	1108	Math for Food Service	1	2	2
DT	1201	Dietetics Professional Practice	1	0	1
DT	1204	Nutrition for the Life Cycle	3	0	3
HRM	3631	Food Service Sanitation	2	0	2
			7	2	8
THIRD TERM					
DT	1205	Nutrition Assessment 1	1	2	2
DT	1206	Community Nutrition	2	0	2
DT	1230	Dietetic Directed Practice - Lifespan	0	5	1
			3	7	5
FOURTH TERM					
DT	1220	Nutrition for Dietary Managers	2	0	2
DT	1231	Dietetic Directed Practice - Health Care	0	5	1
			2	5	3
FIFTH TERM					
CUL	3601	Cooking 1 - Skills Development	0	6	2
			0	6	2

SIXTH TERM					
HRM	3632	Food & Beverage Cost Control 1	3	0	3
OT	XXXX	Computer Elective	2	3	3
			5	3	6
SEVENTH TERM					
DT	1210	Quantity Food Production	2	6	4
HRM	3635	Food & Beverage Supervision	3	0	3
			5	6	7
EIGHTH TERM					
DT	1208	Food Systems Management 1	2	0	2
DT	1232	Dietetic Management Practicum	0	7	1
			2	7	3
NINTH TERM					
DT	1209	Food Systems Management 2	2	0	2
DT	1233	Dietetic Food Service Practicum	0	7	1
			2	7	3
					43

Computer Elective: OT 1850, OT 1863, OT 3058

Hospitality Management Technology (HOSP)

In the Hospitality Management program, students learn operation skills and progress to management training through classroom instruction, laboratory experience, and cooperative education. Graduates earn an Associate of Applied Business degree and are prepared for supervisory positions in a variety of hospitality venues including hotels, restaurants, clubs, and catering companies.

Hospitality Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1108	Math for Food Service	1	2	2
ECO	1512	Microeconomics	3	0	3
HRM	3630	Survey of Hospitality Careers	2	0	2
HRM	3631	Food Service Sanitation	2	0	2
HRM	3653	Hospitality Housekeeping	3	0	3
BT	9200	Professional Practices	1	0	1
OT	XXXX	Computer Elective 1	2	3	3
			17	5	19
SECOND TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
HRM	3652	Hotel Front Office Procedure	4	0	4
OT	XXXX	Computer Elective 2	2	3	3
			18	3	19
FOURTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
FIFTH TERM					
ENG	10XX	English Elective	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
LAW	1823	Business Law 1	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
HRM	3632	Food & Beverage Cost Control 1	3	0	3
			18	2	19
SIXTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
LAW	18XX	Business Law Elective	3	0	3
ACC	2927	Financial Accounting 2	2	2	3
HRM	3633	Food & Beverage Cost Control 2	3	0	3
HRM	3638	Beverage Management and Mixology	0	6	2
XXX	XXXX	Sales Elective	3	0	3
			17	8	20
EIGHTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
NINTH TERM					
ACC	2921	Managerial Accounting	5	0	5
ACC	2950	Financial Statement Analysis	2	0	2
MGT	2989	Customer Service Systems	3	0	3
HRM	3635	Food & Beverage Supervision	3	0	3
HRM	3641	Restaurant Operations	2	4	4
BUS	9233	Business Competencies	2	0	2
XXX	XXXX	Hospitality Elective	3	0	3
			20	4	22
TENTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
					109

Math Electives: MAT 1121 and MAT 1122 and MAT 1123 (no transfer); or MAT 1151 and MAT 1152
English Elective: ENG 1010, ENG 1011
Social Science Elective: ECO 1513 OR LBR 1539
Computer Elective 1: OT 1850 or OT 1863
Computer Elective 2: OT 1863 or OT 1864 or OT 3068
Law Elective: LAW 1824 or LAW 1825
Sales Elective: MKT 1810 or HRM 3636
Hospitality Elective: MGT 1832 or CUL 3609

Event Management Certificate (EMC)

The Event Management certificate is a comprehensive professional development program designed to train students to plan events from start to finish. The program also prepares students for the changes occurring within this complex and competitive industry.

The program is suitable for students seeking a introduction to the event management discipline or those who want specialized event management skills. In addition to core courses, it offers a variety of business offerings, providing exposure to in specific areas of interest.

Event Management Certificate Program

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

Prerequisites: OT 3007 or appropriate compass score. ENG 1003 or ENG 1010 or ENG 1011.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ACC	2924	Acct for Non-Financial Managers	3	0	3
HRM	3642	Intro to Event Management	2	0	2
LAW	1825	Hospitality Law	3	0	3
			8	0	8
SECOND TERM					
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
HRM	3636	Hospitality Sales & Marketing	3	0	3
HRM	3643	On-Site Event Management	4	0	4
			10	0	10
THIRD TERM					
MGT	2989	Customer Service Systems	3	0	3
MGT	2996	Project Management	3	0	3
OT	3093	Workplace Technologies	2	2	3
			8	2	9

FOURTH TERM					
CUL	3609	Cooking 9: Banquets	0	9	3
HRM	3644	Sales, Catering and Menu Production	3	0	3
MGT	2971	Entrepreneurship	3	0	3
OT	3036	Project Management Applications	2	3	3
			8	12	12
					39

Pastry Arts Technology (PAS)

The Pastry Arts Technology program prepares students for employment in the culinary industry as pastry chefs, or, as bakers in the field of baking and flour confectionery. The courses include technical aspects of baking and pastry commonly used in the industry, such as preparing yeast doughs; producing cakes, cookies, and cold desserts; and constructing pastry centerpieces. Graduates earn an Associate of Applied Business degree and are also eligible for certification from the National Retail Bakers Association. Graduates may work in hotels, restaurants, bakeries, pastry shops, and other food service operations that require the services of a baking or pastry professional.

Pastry Arts Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1108	Math for Food Service	1	2	2
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
PAS	2850	Baking Theory 1	3	0	3
PAS	2860	Basic Baking 1	1	4	3
HRM	3630	Survey of Hospitality Careers	2	0	2
HRM	3631	Food Service Sanitation	2	0	2
BT	9200	Professional Practices	1	0	1
			13	6	16
SECOND TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Math Elective	3	0	3
PAS	2851	Baking Theory 2	3	0	3
PAS	2861	Basic Baking 2	1	4	3
PAS	2862	Nutritional Baking	1	3	2
OT	XXXX	Computer Elective	2	3	3
XXX	XXXX	Social Science Elective	3	0	3
			16	10	20
FOURTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Math Elective	3	0	3
LAW	1825	Hospitality Law	3	0	3
PAS	2853	Pastry Theory	3	0	3
PAS	2863	Pastry Production	1	4	3
PAS	2864	Introduction to Pastry Design	1	4	3
HRM	3632	Food & Beverage Cost Control 1	3	0	3
			17	8	21
SIXTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
LBR	1539	Introduction to Employment and Workplace Law 1	3	0	3
PAS	2865	Advanced Pastry	1	4	3
PAS	2866	Pastry Buffet and Design	1	4	3
ACC	2924	Accounting for Non-Financial Managers	3	0	3
MGT	2989	Customer Service Systems	3	0	3
HRM	3635	Food & Beverage Supervision	3	0	3
			17	8	21
EIGHTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
NINTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	15XX	Economics Elective	3	0	3
PAS	2867	Restaurant Dessert Production	2	8	6
PAS	28XX	Pastry Elective	1	4	3
HRM	3636	Hospitality Sales & Marketing	3	0	3
BUS	9233	Business Competencies	2	0	2
			14	12	20
TENTH TERM					
HOSP	9224	Cooperative Education-Hospitality Technologies	1	40	2
			1	40	2
					108

Math Electives: MAT 1121 and MAT 1122 (no transfer); or MAT 1151 and MAT 1152; or MAT 1124 and MAT 1111 and MAT 1112
Computer Elective: OT 1850, OT 1863, OT 3058
English Elective: ENG 1003, ENG 1010, ENG 1011
Social Science Elective: Any ECO, PSY, SOC, LBR, HST, GEO, ART, MUS, LIT, PHI, POL
Economics Elective: ECO 1512, ECO 1513, ECO 1514
Pastry Elective: PAS 2868, PAS 2869, PAS 2878

Pastry Arts Certificate (PASC)

The Pastry Arts certificate program provides a basic introduction to the baking pastry production field. This one-year evening program includes instruction in the various methods of pastry production used in the food service industry. This certificate program meshes with the Pastry Arts degree program, allowing students to apply earned credit toward obtaining a degree.

Pastry Arts Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
PAS	2850	Baking Theory 1	3	0	3
PAS	2860	Basic Baking 1	1	4	3
HRM	3631	Food Service Sanitation	2	0	2
			6	4	8
SECOND TERM					
PAS	2851	Baking Theory 2	3	0	3
PAS	2861	Basic Baking 2	1	4	3
			4	4	6
THIRD TERM					
PAS	2853	Pastry Theory	3	0	3
PAS	2863	Pastry Production	1	4	3
			4	4	6
FOURTH TERM					
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
PAS	2862	Nutritional Baking	1	3	2
			4	3	5
					25

Personal Chef Certificate (PCC)

The Personal Chef certificate program provides culinary and non-culinary training in small business management, nutrition, and healthy cooking. Upon completion, students are qualified to operate individual businesses as chef entrepreneurs to an established client base.

This certificate compliments the Culinary Arts and Pastry Arts and Dietetics degree programs.

Personal Chef Certificate

Must successfully complete MAT 1108, Math for Food Service, to enter certificate program.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CUL	3601	Cooking 1 - Skills Development	0	6	2
HRM	3631	Food Service Sanitation	2	0	2
HRM	3632	Food & Beverage Cost Control 1	3	0	3
PCC	3670	Personal Chef Principles	2	0	2
			7	6	9
SECOND TERM					
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
MGT	2971	Entrepreneurship	3	0	3
CUL	3602	Cooking 2 - Stock Sauces, Soup	0	6	2
CUL	3611	Baking for Restaurants 1	0	6	2
			6	12	10
THIRD TERM					
PAS	2862	Nutritional Baking	1	3	2
CUL	3603	Cooking 3 - Meat, Fish, Poultry	0	6	2
PCC	3671	Personal Chef Meal and Menu Planning	0	6	2
			1	15	6
FOURTH TERM					
MGT	2972	Business and Implementation Planning	3	0	3
CUL	3606	Cooking 6 - Nutritional Cooking	0	6	2
PCC	3672	Personal Chef Practices	0	6	2
			3	12	7
					32

Landscape Horticulture Technologies

Program Chair: Mark Deacon
Co-op Coordinator: Joe Roberts
Advisor: Heather Wiggins

Landscape Horticulture Technologies programs provide knowledge and skills for various careers in the green industry. Three programs leading to an Associate of Applied Business degree and two certificate programs are available. The industry in the Cincinnati area has been undergoing strong growth for several years; employment opportunities in the industry are good to excellent.

Because of the seasonal employment opportunities of horticultural jobs, these degree programs follow a unique co-op schedule. Students spend two terms during the growing season in cooperative employment during each of the two years of the program. These assignments usually occur during the Spring, Summer, and/or Early Fall terms.

Landscape Horticulture Technology (LH)

The Landscape Horticulture Technology program focuses on interior and exterior landscape design, installation, and management. Students complete required foundation courses in horticulture, then take additional technical courses in subject areas tailored to individual needs, including advanced landscape design, computerized landscape design, landscape construction, arboriculture, or greenhouse or nursery management. Core business courses are included, preparing students for management positions. Graduates earn an Associate of Applied Business degree. The Landscape Horticulture degree program is industry accredited by the Professional Landcare Network (PLANET), formerly known as the Associated Landscape Contractors of America.

Landscape Horticulture Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11X1	Math Elective	3	2	4
LH	3502	Horticulture Science	2	2	3
LH	3504	Woody Plant Materials 1	2	3	3
LH	3508	Turfgrass Management	2	2	3
BT	9200	Professional Practices	1	0	1
			13	9	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11X2	Math Elective	3	2	4
PSY	1502	Human Relations-Applied Psychology	3	0	3
LH	3500	Orient to Horticulture Occupations	1	0	1
LH	3510	Small Engine Maintenance & Repair	2	2	3
LH	3532	Landscape Management	2	3	3
			14	7	17
THIRD TERM					
ACC	29XX	Accounting Elective	3	0	3
LH	3501	Soils and Plant Nutrition	3	2	4
LH	3509	Landscape Design 1	2	3	3
LH	3523	Horticulture Entomology	2	2	3
LH	35XX	Technical Elective	2	2	3
			12	9	16
FOURTH TERM					
LH	9225	Cooperative Education Landscape Horticulture/ Turf Management	1	40	2
			1	40	2
FIFTH TERM					
ENG	10XX	English Elective	3	0	3
LH	3505	Intro to Herbaceous Plant Materials	2	2	3
LH	3511	Intro to Landscape Construction	2	3	3
LH	3520	Horticulture Lab	0	3	1
LH	3524	Plant Pathology	2	2	3
LH	35XX	Technical Elective	2	3	3
			11	13	16
SIXTH TERM					
LH	9225	Cooperative Education Landscape Horticulture/ Turf Management	1	40	2
			1	40	2
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	151X	Economics Elective	3	0	3
OT	1850	Intro to Computer Applications	3	2	4
MGT	2989	Customer Service Systems	2	3	3
LH	3515	Woody Plant Materials 2	2	3	3
LH	35XX	Technical Elective	2	3	3
			15	11	19
EIGHTH TERM					
MKT	1810	Principles of Sales	3	0	3
LAW	1823	Business Law 1	3	0	3
MGT	2967	Introduction to Management	3	0	3
LH	35XX	Technical Elective	2	3	3
BUS	9233	Business Competencies	2	0	2
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			16	3	17
NINTH TERM					
LH	9225	Cooperative Education Landscape Horticulture/ Turf Management	1	40	2
			1	40	2
TENTH TERM					
LH	9225	Cooperative Education Landscape Horticulture/ Turf Management	1	40	2
			1	40	2
					110

Accounting Elective: ACC 2926, ACC 2924
English Elective: ENG 1003, ENG 1010, ENG 1011
Technical Elective: LH 3506, LH 3507, LH 3513, LH 3516, LH 3517, LH 3518,

LH 3519, LH 3525, LH 3528, LH 3529, LH 3533, LH 3534, LH 3535, LH 3536, LH 3537, LH 3538, LH 3539, LH 3540, LH 3544, LH 3546, LH 3547, LH 3548, LH 3552, MGT 2904
Economics Elective: ECO 1512, ECO 1513
Social Science/Humanities Elective: Any PSY, SOC, GEO, LBR, HST, ECO, SPN, POL
Math Elective: MAT 1161, MAT 1162, or MAT 1171, MAT 1172, or MAT 1191, MAT 1192

Sustainable Horticulture Technology (SH)

The Sustainable Horticulture Technologies program trains students in sustainable landscape techniques and technologies. These include design, implementation, and management of green roofs, green walls, stormwater management, management best practices, sustainable choices in plant materials, and use of alternative energy systems in landscapes. Students complete required foundation courses in landscape horticulture and environmental science, then take additional technical courses in sustainable horticulture. Core business courses prepare students for leadership roles in local businesses and municipalities while cooperative education employment experiences allow students to use field experience to further develop their knowledge in positions with companies utilizing sustainable horticulture. Graduates of the program earn an Associate of Applied Business degree.

Sustainable Horticulture Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
LH	3502	Horticulture Science	2	2	3
LH	3504	Woody Plant Materials 1	2	3	3
XXX	XXXX	Environmental Science Elective	3	2	4
			10	7	13
SECOND TERM					
BT	9200	Professional Practices	1	0	1
ENG	1002	English Composition 2	3	0	3
LH	3501	Soils and Plant Nutrition	3	2	4
MAT	1161	Applied Algebra	3	2	4
PSY	1502	Human Relations-Applied Psychology	3	0	3
XXX	76XX	Environmental Science Elective	2	3	3
			15	7	18
THIRD TERM					
ACC	29XX	Accounting Elective	3	0	3
CET	7935	Intro to CAD (CET)	2	3	3
ENG	10XX	English Elective	3	0	3
LH	3509	Landscape Design 1	2	3	3
LH	3532	Landscape Management	2	3	3
MAT	1162	Applied Geometry & Trigonometry	3	2	4
XXX	76XX	Environmental Science Elective	2	3	3
			17	14	22
FOURTH TERM					
LH	9225	Cooperative Education Landscape Horticulture/Turf	1	40	2
			1	40	2
FIFTH TERM					
LH	3505	Intro to Herbaceous Plant Materials	2	2	3
LH	3511	Intro to Landscape Construction	2	3	3
LH	3520	Horticulture Lab	0	3	1
LH	3563	Technologies in Landscape Substantiability	2	2	3
MGT	2967	Intro to Management	3	0	3
XXX	76XX	Environmental Science elective	2	3	3
			11	13	16
SIXTH TERM					
LH	3560	Plants for Sustainable Landscapes	2	3	3
LH	9225	Cooperative Education Landscape Horticulture/Turf	1	40	2
			3	43	5
SEVENTH TERM					
ECO	15XX	Economics Elective	3	0	3
LAW	1823	Business Law 1	3	0	3
LH	3561	Landscape Solutions to Stormwater Management	2	2	3
LH	3562	Energy Use in Modern Landscapes	2	2	3
MGT	2989	Customer Service Systems	3	0	3
MKT	1810	Principles of Sales	3	0	3
			16	4	18
EIGHTH TERM					
XXX	XXXX	Social Science elective	3	0	3
BUS	9233	Business Competencies	2	0	2
COMM	1020	Public Speaking	3	0	3
LH	3564	Horticulture Implications Climate Change	1	2	2
LH	3565	Sustainable Landscape Design	1	2	2
			10	4	12
NINTH TERM					
LH	9225	Cooperative Education Landscape Horticulture/Turf	1	40	2
			1	40	2
TENTH TERM					
LH	9225	Cooperative Education Landscape Horticulture/Turf	1	40	2
			1	40	2
					110

Accounting Elective: ACC 2924, ACC 2926
English Elective: ENG 1003, ENG 1010, ENG 1011
Economics Elective: ECO 1512, ECO 1513
Social Science/Humanities Elective: Any PSY, SOC, GEO, LBR, HST, ECO, SPN, POL
Environmental Science Elective: Take 13 hours from EVS 7622, EVS 7623, EVS 7624, EVET 7675, EVET 7670, EVS 7699

Sustainable Horticulture Certificate (SHC)

The Sustainable Horticulture certificate is designed primarily for students with prior landscape industry experience or a prior landscape horticulture degree.

Sustainable Horticulture Certificate

			Hours Per Week Class	Lab	Credit Hours
EVET	7670	Regulations & Permits	2	3	3
EVET	7675	Solid Waste Management	2	3	3
EVS	7622	Environmental Science: Conservation and Clean-up	3	2	4
EVS	7623	Environmental Geology	3	2	4
EVS	7624	Environmental Science: Ecology and Ecosystems	3	2	4
LH	3501	Soils and Plant Nutrition	3	2	4
LH	3502	Horticulture Science	2	2	3
LH	3509	Landscape Design 1	2	3	3
LH	3532	Landscape Management	2	3	3
LH	3560	Plants for Sustainable Landscapes	2	3	3
LH	3561	Landscape Solutions to Stormwater Management	2	2	3
LH	3562	Energy Use in Modern Landscapes	2	2	3
LH	3563	Technologies in Landscape Substantiability	2	2	3
LH	3564	Hort. Implications of Climate Change	1	2	2
LH	3565	Sustainable Landscape Design	1	2	2
			32	35	47
					47

Turfgrass Management Technology (TUR)

The Turfgrass Management Technology program, leading to an Associate of Applied Business degree, concentrates on golf course management, athletic/sports turf management, and professional lawn care. Common course requirements within the Landscape Horticulture program such as Soils and Plant Nutrition and Basic Landscape Design in addition to math, business, and other basic college requirements, prepare students for management positions.

Turfgrass Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Math Elective	3	2	4
LH	3502	Horticulture Science	2	2	3
LH	3504	Woody Plant Materials 1	2	3	3
LH	3508	Turfgrass Management	2	2	3
BT	9200	Professional Practices	1	0	1
			13	9	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11X2	Math Elective	3	2	4
PSY	1502	Human Relations-Applied Psychology	3	0	3
LH	3510	Small Engine Maintenance & Repair	2	2	3
LH	3526	Intro to Golf and Turf Management	1	1	1
LH	3532	Landscape Management	2	3	3
			14	8	17
THIRD TERM					
ENG	10XX	English Elective	3	0	3
MGT	2967	Introduction to Management	3	0	3
ACC	29XX	Accounting Elective	3	0	3
LH	3501	Soils and Plant Nutrition	3	2	4
LH	3509	Landscape Design 1	2	3	3
XXX	XXXX	Social Science Elective	3	0	3
			17	5	19
FOURTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
			1	40	2
FIFTH TERM					
MKT	1810	Principles of Sales	3	0	3
LH	3505	Intro to Herbaceous Plant Materials	2	2	3
LH	3511	Intro to Landscape Construction	2	3	3
LH	3520	Horticulture Lab	0	3	1
LH	3537	Turfgrass Pests	2	2	3
			9	10	13
SIXTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
			1	40	2
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	151X	Economics Elective	3	0	3
OT	1850	Intro to Computer Applications	3	2	4
MGT	2989	Customer Service Systems	2	3	3
LH	3533	Principles of Irrigation	2	2	3
LH	3556	Advanced Turfgrass Management	2	2	3
			15	9	19
EIGHTH TERM					
LAW	1823	Business Law 1	3	0	3
LH	3529	Landscape Grading, Drainage and Surveying	2	3	3
LH	3549	Pesticide Safety and Application	2	2	3
LH	3550	Golf Course Management	2	3	3
LH	355X	Turfgrass Elective	2	2	3
BUS	9233	Business Competencies	2	0	2
			13	10	17
NINTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
			1	40	2
TENTH TERM					
LH	9225	Cooperative Education Landscape Hort./Turf Mgt.	1	40	2
			1	40	2
					110

Accounting Elective: ACC 2911, ACC 2924
Economics Elective: ECO 1512, ECO 1513
English Elective: ENG 1003, ENG 1010, ENG 1011
Social Science Elective: Any PSY, SOC, GEO, LBR, HST, ECO, SPN, POL
Math Elective: MAT 1161, MAT 1162, or MAT 1171, MAT 1172, or MAT 1191, MAT 1192
Turfgrass Elective: LH 3552, LH 3554

Landscape Design Certificate (LDC)

The Landscape Design certificate offers a concentration in design courses. It is best suited for students who are also pursuing the Landscape Horticulture Technologies degree or those with landscape industry backgrounds who wish to enhance their technical landscape design skills. This technical focus also includes construction and estimating courses.

Landscape Design Certificate

			Hours Per Week Class	Lab	Credit Hours
LH	3504	Woody Plant Materials 1	2	3	3
LH	3509	Landscape Design 1	2	3	3
LH	3511	Intro. to Landscape Construction	2	3	3
LH	3513	Advanced Landscape Construction	2	3	3
LH	3517	Computer Aided Landscaping Drafting	2	3	3
LH	3518	Landscape Design 2	2	3	3
LH	3519	Landscape Contracts and Specifications	3	0	3
LH	3529	Landscape Grading, Drainage and Surveying	2	3	3
LH	3532	Landscape Management	2	3	3
LH	3533	Principles of Irrigation	2	2	3
LH	3535	Woody Plant Materials 3	2	3	3
LH	3539	Landscape Design 3	2	3	3
LH	3546	Computer Aided Landscape Drafting 2	2	3	3
XXX	XXXX	Landscape Horticulture/Sales Elective	2	3	3
			29	38	42
					42

Landscape Horticulture/Sales Elective: LH 3505, LH 3515, LH 3547, MKT 1810; others with advisor consent.

Information Management Technologies

Program Chair: Connie Crossley
Co-op Coordinator: Adam Waits
Advisors: Connie Crossley, Viola Johnson, Colleen Meyer

Information Management Technologies offer four degree programs: Executive Assistant, Legal Assistant, Medical Administrative Assistant, and Office Management, and two certificate programs: Computer Applications and Office Support. The curricula include not only technical skill development but also courses in business principles and management. Advanced placement is available through testing in selected courses. Minimum grades of C are required in all technical courses.

Executive Assistant Technology (EA)

Executive Assistant Technology training develops competencies in office procedures, information processing, communications, organizational skills, time management, project management, and computer use. Graduates earn an Associate of Applied Business degree and can expect to work as administrative or executive assistants with top-level executives as part of a management team.

Executive Assistant Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
MGT	2967	Introduction to Management	3	0	3
OT	3021	Office Procedures 1	2	3	3
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
BT	9200	Professional Practices	1	0	1
			16	9	19
SECOND TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
OT	3069	Advanced Microsoft Word	2	3	3
			14	11	18
FOURTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
ECO	1512	Microeconomics	3	0	3
OT	3003	Document Formatting 2	2	3	3
OT	3022	Proofreading and Editing	2	2	3
OT	3036	Project Management Applications	2	3	3
OT	30XX	Technical Elective	2	3	3
			14	11	18
SIXTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
OT	3024	Office Procedures 3	2	2	3
OT	3068	Database Management: Access 1	2	3	3
OT	3093	Workplace Technologies	2	2	3
			18	9	22
EIGHTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
NINTH TERM					
COMM	1020	Public Speaking	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
LAW	1823	Business Law 1	3	0	3
ACC	2927	Financial Accounting 2	2	2	3
MGT	2989	Customer Service Systems	2	3	3
OT	3064	Introduction to PowerPoint	2	3	3
OT	3092	Desktop Publishing with Microsoft Publisher	2	2	3
			17	10	21
TENTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					110

Technical Electives: GC 1423, OT 3016, OT 1864, OT 3066, OT 3070, OT 3073, OT 3074, OT 3075, OT 3076
English Elective: ENG 1003, ENG 1011

Legal Assistant Technology (LA)

The two-year Legal Assistant Technology program prepares students to perform legal administrative duties for law firms, banks, corporations, and savings and loans. The Legal Assistant program develops competence in word processing, legal terminology, legal office procedures, legal documentation, legal transcription, legal research, time management, and organizational skills. Graduates earn an Associate of Applied Business degree upon successful completion of the program.

Legal Assistant Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
MGT	2967	Introduction to Management	3	0	3
OT	3021	Office Procedures 1	2	3	3
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
BT	9200	Professional Practices	1	0	1
			16	9	19
SECOND TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
LAW	1823	Business Law 1	3	0	3
OT	3003	Document Formatting 2	2	3	3
OT	3016	Introduction to Legal Environment	3	0	3
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
			18	9	21
FOURTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2926	Financial Accounting 1	3	2	4
OT	3017	Legal Formatting	2	3	3
OT	3022	Proofreading and Editing	2	2	3
OT	3069	Advanced Microsoft Word	2	3	3
			17	12	22
SIXTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
LAW	1830	Legal Research 1	3	0	3

MKT	2901	Principles of Marketing 1	3	0	3
ACC	2927	Financial Accounting 2	2	2	3
OT	3018	Legal Transcription	2	3	3
OT	3068	Database Management: Access 1	2	3	3
			15	8	18
EIGHTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
NINTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	1512	Microeconomics	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
MGT	2989	Customer Service Systems	2	3	3
OT	3019	Law Office Practice	2	3	3
OT	3064	Introduction to PowerPoint	2	3	3
			15	9	18
TENTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					110

English Elective: ENG 1003, ENG 1011

Medical Administrative Assistant Technology (MAA)

The Medical Administrative Assistant Technology program prepares students to perform administrative duties for medical offices and healthcare facilities. Students develop competencies in medical office procedures, organizational skills, time management, communications, medical terminology, application software, and coding. Graduates earn an Associate of Applied Business degree and can expect to work as medical administrative assistants or as medical office managers.

Medical Administrative Assistant Technology

Program prerequisites: Keyboarding skill 30 words per minute minimum, or take OT 3007 to gain speed requirement.
All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
OT	1850	Intro to Computer Applications	3	2	4
OT	3021	Office Procedures 1	2	3	3
MCH	4806	Medical Terminology 1	3	0	3
BT	9200	Professional Practices	1	0	1
			15	5	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	3058	Microsoft Word for Windows	2	3	3
HIM	4407	Health Record Content and Format	2	2	3
HIM	4415	Legal Aspects of Health Information	3	0	3
MCH	4807	Medical Terminology 2	3	0	3
			16	5	18
THIRD TERM					
OT	3035	Essential Business Correspondence	2	3	3
OT	9227	Cooperative Education-Information Management	1	40	2
			3	43	5
FOURTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
ACC	2926	Financial Accounting 1	3	2	4
OT	3003	Document Formatting 2	2	3	3
MA	4210	Medical Office Insurance and Coding	3	2	4
MA	4221	Medical Administrative Procedures	2	3	3
			15	12	20
FIFTH TERM					
MGT	2967	Introduction to Management	3	0	3
OT	9227	Cooperative Education-Information Management	1	40	2
			4	40	5
SIXTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
ENG	10XX	English Elective	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
ECO	1512	Microeconomics	3	0	3
OT	3005	Medical Formatting and Transcription	2	3	3
OT	3093	Workplace Technologies	2	2	3
			16	5	18
EIGHTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
LAW	1823	Business Law 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
MGT	2989	Customer Service Systems	2	3	3
OT	30XX	Technical Elective	2	3	3
MA	4245	Medical Office Billing and Reimbursement	2	3	3
			15	9	18
NINTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
TENTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
BUS	9233	Business Competencies	2	0	2
			3	40	4
					109

English Elective: ENG 1003, ENG 1011
Technical Elective: OT 3036, OT 3064, OT 3068 or other electives permitted with advisor consent

Office Management Technology (OM)

The Office Management Technology program develops the fundamental skills necessary for supervision, office management, information processing, accounting, spreadsheet organization, and other techniques that provide the base for a range of office jobs. Graduates earn an Associate of Applied Business degree and can expect to work in positions that assist key personnel with the timely and efficient flow of office functions.

Office Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
MGT	2965	Principles of Management 1	3	0	3
OT	3021	Office Procedures 1	2	3	3
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
BT	9200	Professional Practices	1	0	1
			16	9	19
SECOND TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2

THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
MGT	2966	Principles of Management 2	3	0	3
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
			15	8	18
FOURTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
FIFTH TERM					
MAT	1123	Business Mathematics 3	3	0	3
LAW	1823	Business Law 1	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
OT	3003	Document Formatting 2	2	3	3
OT	3022	Proofreading and Editing	2	2	3
OT	3064	Introduction to PowerPoint	2	3	3
			15	10	19
SIXTH TERM					
OT	9227	Cooperative Education-Information Management	1	40	2
			1	40	2
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
ENG	10XX	English Elective	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
ACC	2927	Financial Accounting 2	2	2	3
OT	3024	Office Procedures 3	2	2	3
OT	3068	Database Management: Access 1	2	3	3
OT	3093	Workplace Technologies	2	2	3
			17	9	21
EIGHTH TERM					
OT	9247	Cooperative Education-Information Management-Parallel	1	20	1
OT	30XX	Technical Elective	2	3	3
			3	23	4
NINTH TERM					
ECO	1512	Microeconomics	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2947	Computerized Bookkeeping 1	1	2	2
MGT	2989	Customer Service Systems	2	3	3
OT	3070	Administrative Office Management 1	3	0	3
XXX	XXXX	Technical Elective	2	3	3
			17	8	20
TENTH TERM					
BUS	9233	Business Competencies	2	0	2
OT	9247	Cooperative Education-Information Management-Parallel	1	20	1
			3	20	3
					110

Technical Electives: GC 1423, OT 1864, OT 3023, OT 3036, OT 3066, OT 3069, OT 3092, OT 3073, OT 3074, OT 3075
English Elective: ENG 1003, ENG 1011

Computer Applications Certificate (CAPC)

Students in any major who wish to complement their degree program with computer skills and add to their prospects for employment can enroll in the Computer Applications certificate along with their degree program.

The certificate contains a core of 27 credit hours that provide instruction in Microsoft software programs and nine elective credits from a published list. Advanced placement credit for this certificate requires Microsoft Office Specialist certification.

Computer Applications Certificate

Prerequisite for admission to certificate program: OT 3007 or 30 words per minute.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
OT	3058	Microsoft Word for Windows	2	3	3
OT	3095	Introduction to Computers, Windows, Internet	2	3	3
			4	6	6
SECOND TERM					
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
OT	3069	Advanced Microsoft Word	2	3	3
			4	5	6
THIRD TERM					
OT	1864	Adv Electronic Spreadsheets (Excel)	2	2	3
OT	3064	Introduction to PowerPoint	2	3	3
OT	3068	Database Management: Access 1	2	3	3
			6	8	9
FOURTH TERM					
OT	3036	Project Management Applications	2	3	3
OT	3092	Desktop Publishing with Microsoft Publisher	2	2	3
OT	XXXX	Technical Elective	2	3	3
			6	8	9
FIFTH TERM					
OT	3066	Integrated Information Processing	2	3	3
OT	XXXX	Technical Elective	2	3	3
			4	6	6
					36

Advanced Standing by MOUS Certification only.
Technical Electives: GC 1423, OT 3002, OT 3003, OT 3074, OT 3076, ACC 2947, IT 5291, IT 5231, IT 5441, IT 5453

Office Support Certificate (OSCP)

Students who wish to develop marketable office skills in a short period of time may be interested in the Office Support certificate. Students learn office procedures, grammar and punctuation, document formatting, and computer skills.

Office Support Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
OT	3003	Document Formatting 2	2	3	3
OT	3021	Office Procedures 1	2	3	3
			4	6	6
SECOND TERM					
OT	3032	Office Procedures 2	2	3	3
OT	3035	Essential Business Correspondence	2	3	3
			4	6	6
THIRD TERM					
OT	3058	Microsoft Word for Windows	2	3	3
OT	XXXX	Technical Elective	2	3	3
			4	6	6
FOURTH TERM					
OT	3022	Proofreading and Editing	2	2	3
OT	3024	Office Procedures 3	2	2	3
			4	4	6
FIFTH TERM					
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
OT	3068	Database Management: Access 1	2	3	3
			4	5	6
SIXTH TERM					
OT	3066	Integrated Information Processing	2	3	3
OT	XXXX	Technical Elective	2	3	3
			4	6	6
					36

If keyboarding skill is less than 30 wpm, OT 3007, OT 3006 and OT 3002 may be necessary as prerequisites to OT 3003.
Technical Electives: OT 1864, OT 3016, OT 3017, OT 3023, OT 3036, OT 3064, OT 3069, OT 3070, OT 3074, OT 3076, OT 3092, OT 3095

Real Estate Technology (RE)

Program Chairs: Carolyn Waits, Jim Wood
Co-op Coordinator: Kelly Harper
Advisor: Jim Wood

The Real Estate Technology program prepares students for careers in residential and commercial real estate sales, management, or financing. The program provides an educational foundation that satisfies the requirements for licensing and future requirements for becoming a real estate broker. In addition to meeting the pre-licensing requirements for real estate sales, students learn about residential and commercial property management, property appraisal, real estate investing, marketing, management, and the human relations and customer service systems essential for business success. Students gain hands-on experience with co-op employers such as Huff Realty, REMax Premier, Century 21, Hart Realty, Sibcy Cline, Coldwell Banker, Hoeting Realty, and Group Realtors.

Graduates earn an Associate of Applied Business degree and may obtain employment in local and national real estate firms, financial institutions, insurance companies, and many major corporations. Some graduates also become real estate investors and entrepreneurs managing their own real estate portfolios.

Real Estate Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
RE	2951	Real Estate Principles & Practices	4	0	4
RE	2953	Real Estate Law	4	0	4
BT	9200	Professional Practices	1	0	1
OT	XXXX	Computer Elective	2	3	3
			17	3	18
SECOND TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
			1	40	2
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
COMM	102X	Communication Elective	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
RE	2954	Real Estate Finance and Appraisal	4	0	4
			18	2	19
FOURTH TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
			1	40	2
FIFTH TERM					
ENG	10XX	English Elective	3	0	3
MAT	11XX	Mathematics Elective	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
ACC	2926	Financial Accounting 1	3	2	4
RE	2931	Intro to Property Management	3	0	3
RE	2958	Real Estate Investing	3	0	3
MGT	2967	Introduction to Management	3	0	3
			21	2	22
SIXTH TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
			1	40	2
SEVENTH TERM					
FIN	1804	Risk & Insurance	3	0	3
MGT	1832	Human Resource Management	3	0	3
MKT	2902	Principles of Marketing 2	3	0	3
RE	2932	Residential Property Management	3	0	3
FIN	2960	Business Finance	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
			18	0	18
EIGHTH TERM					
RE	9229	Cooperative Education Real Estate/Property Mgt.	1	40	2
			1	40	2
NINTH TERM					
MKT	1810	Principles of Sales	3	0	3
LAW	1823	Business Law 1	3	0	3
RE	2932	Residential Property Management	3	0	3
RE	2933	Foundations in Commercial Real Estate Management	3	0	3
RE	2956	Appraising Income Properties	3	0	3
MGT	2989	Customer Service Systems	3	0	3
BUS	9233	Business Competencies	2	0	2
XXX	XXXX	Technical Elective	2	3	3
			23	0	23
TENTH TERM					
RE	9249	Cooperative Education Real Estate/ Property Management - Parallel	1	20	1
			1	20	1
					109

Computer Elective: OT 1850, OT 3036, OT 3058, OT 3064, OT 3068, OT 1864
Math Electives: Minimum of 9 credit hours: MAT 1121, MAT 1122, MAT 1123 or MAT 1151, MAT 1111, MAT 1112
Communication Elective: COMM 1020, COMM 1024
Social Science Elective: PSY 1502, PSY 1504, PSY 1505, SOC 1521, LBR 1535, any POL
English Elective: ENG 1003, ENG 1011
Economics Elective: ECO 1512, ECO 1513

Center for Innovative Technologies

Division Phone Number: (513) 569-1743

The Center for Innovative Technologies encompasses Cincinnati State's academic programs and majors in information and engineering technologies. Cincinnati State has been recognized nationally and internationally for over 30 years as a center of excellence in engineering technologies education, and the newer information technologies programs have served as regional educational models for innovation.

The academic programs within the Center for Innovative Technologies are organized into seven departments:
- Chemical and Environmental Engineering Technologies
- Civil Engineering Technologies
- Computer Software Development
- Electrical Engineering Technologies
- Mechanical Engineering Technologies
- Multimedia Information Design
- Network Systems

The Center for Innovative Technologies also provides an associate's degree program in Aviation Maintenance Technology, which is approved by the Federal Aviation Administration, along with related certificate programs. Technical coursework is offered exclusively at the Cincinnati State West campus in Harrison, Ohio.

All of the associate's degree programs offered by the Center for Innovative Technologies feature:
- Faculty with professional experience in their areas of instruction, who also are advisors to students throughout their college experience.
- Technical coursework that blends basic theory (including skills

in mathematics and science, as applicable) with extensive hands-on laboratory practice.
- Foundation academic skills courses in written and oral communication, humanities, and social sciences.
- Ease of transfer to baccalaureate degree programs.
- Cooperative education work experience. The close tie with industry created by the cooperative education component ensures all programs remain technically current, and provides students with practical workplace knowledge and experience prior to graduation.

The Engineering Technologies programs within the Center for Innovative Technologies mission is to serve students by promoting excellence in engineering technologies through professional instruction, cooperative education, and advising. Several of these programs have earned accreditation through the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone: (410) 347-7700.

The Center for Innovative Technologies also offers several certificate programs that address specific technical skills. Certificates have fewer course requirements than an associate's degree.

The Center for Innovative Technologies provides an associate's degree program in Aviation Maintenance Technology, which is approved by the Federal Aviation Administration, along with related certificate programs. Technical coursework is offered exclusively at the Cincinnati State West campus in Harrison, Ohio.

Cooperative Education

The cooperative education experience is a cornerstone of the educational process in the Center for Innovative Technologies.

All students enrolled in associate's degree programs are required to participate in cooperative education. Most students complete this requirement through on-site cooperative education assignments. Students may earn credit by alternating full-time terms in the classroom with full-time terms of cooperative education, typically over a 10-term period. In a few academic programs where competition for entry-level assignments is particularly strong, students may have opportunities to earn credit by participating in unpaid internships.

Students may also be able to substitute appropriate academic courses or previous related work experience for cooperative education employment, with prior approval from the appropriate program co-op coordinator.

For eligibility requirements, co-op registration policies, and other issues related to cooperative education, please refer to the "Cooperative Education Program" section of the catalog.

Entrance Competencies

In order to ensure a high degree of success in academic studies in engineering and information technologies, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS®, the college admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Students entering most academic programs of the Center for Innovative Technologies must demonstrate competence with commonly-used software applications and with basic Internet operations. Students may be asked to demonstrate these competencies through standardized skills assessment tests or by completing prerequisite courses if necessary. Program advisors assist students in determining whether they meet minimum competencies.

All students enrolled in associate's degree programs in the Center for Innovative Technologies must complete a First Year Experience (FYE) course within the first 18 credit hours taken at Cincinnati State. Full-time students who follow the published sequence of courses can complete associate's degree programs in two years.

Transfer to Baccalaureate Programs

Many of the degree programs offered by the Center for Innovative Technologies have established articulation agreements to ease transfer of credits earned at Cincinnati State to baccalaureate programs at various colleges and universities. Agreements are in place with Miami University, University of Cincinnati, Northern Kentucky University, University of Findlay, Embry-Riddle Aeronautical University, University of Toledo, and Wilmington College, among others. Each of these agreements vary in content. Interested students should meet with their program advisor as early as possible to review the details of possible transfer arrangements.

The articulation agreement with the University of Toledo allows graduates of four Cincinnati State programs to complete a Bachelor of Computer Science and Engineering Technology degree on Cincinnati State's campus. These programs are: Electro-Mechanical Engineering Technology, Electronics Engineering Technology, Biomedical Equipment & Information Systems Technology, and Computer Network Engineering Technology.

Articulations with Wilmington College allow graduates of the Center's Multimedia Information Design programs to complete a Bachelor of Arts in Multimedia Studies on Cincinnati State's campus. Graduates of the Center's Network Systems and Computer Software Development programs can complete a Bachelor of Arts degree in Business Administration on Cincinnati State's campus.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of this catalog.

Associate's degree programs in the Center for Innovative Technologies contain in their curricula many of the required courses for the Cincinnati State Transfer Module. Students who wish to complete the transfer module should schedule the additional courses at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that the Cincinnati State Associate of Applied Science degree, combined with a transfer module showing grades of C or higher, receives preferential consideration at the receiving institution. Additionally, the transfer is streamlined for graduates of some Center for Innovative Technologies programs by the articulation agreements described above.

Chemical and Environmental Engineering Technologies Department

Chemistry plays a major role in the advancement of society and in making our lives longer, healthier, more comfortable, and more enjoyable. Without chemistry there would be no pharmaceutical drugs, no computers, no automobiles, no TVs, no DVDs, no lights, and no synthetic fibers. However, despite the benefits resulting from these chemical advances, large amounts of toxic and corrosive chemicals have been dispersed into the environment. It is not just the chemical industry, or even industry as a whole that has emitted troublesome substances into the air, water, and soil. Since the industrial revolution, increases in population and affluence have overloaded the atmosphere with carbon dioxide and toxic air pollutants, the waters with sewage, and the soil with garbage.

Society has become increasingly aware of the need for responsible stewardship of the earth. This has resulted in a growing need for environmental and chemical professionals who not only develop and use technology, but who do so in an environmentally responsible manner, and who help correct the problems created by past practices.

The programs in the Chemical and Environmental Engineering Technologies Department are designed to develop professionals capable of conducting chemical analysis and promoting new technologies while preserving and improving environmental quality.

The Chemical and Environmental Engineering Technologies Department offers degree programs in Chemical Technology and Environmental Engineering Technology, with additional majors in Environmental Engineering Technology - Water and Wastewater and Environmental Engineering Technology - Stormwater Management. The department also offers a certificate program in Environmental Safety and Security. These certificate courses are a component of the Public Safety Technology degree program offered through the Health and Public Safety Division.

Chemical Technology (CMT)

Program Chair: Martha Brosz
Co-op Coordinator: Sue Dolan
The Chemical Technology program prepares students for employment in industry or government laboratories performing research and analytical testing on specific products and processes. Graduates may fulfill a variety of jobs such as instrumental analysis of pharmaceuticals and other consumer products, testing polymer properties, or performing chemical analysis of forensics samples.

Because the Chemical Technology curriculum has ample science requirements, including chemistry and physics, students who wish to earn a Bachelor of Science degree from a university may find that the CMT curriculum serves their transfer needs well. Students may also choose electives from biology and environmental courses if they choose to pursue a career or an additional degree in biochemistry/biotechnology or environmental science.

Chemical Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
CMT	6611	Chemistry 1 and Quantitative Analysis	4	4	6
CMT	6619	Computer Analysis of Laboratory Data	3	0	3
ET	9300	Technology Career Preparation	1	1	1
			14	7	17
SECOND TERM					
CMT	6618	Basic Practices for Chemical Laboratory Technicians	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1111	Statistics 1	3	0	3
MAT	11XX	Algebra Elective	4	0	4
PHY	22XX	Physics Elective 1	3	2	4
CMT	6621	Chemistry 2 and Quantitative Analysis	4	4	6
			14	6	17
FOURTH TERM					
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	43	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
PHY	22XX	Physics Elective 2	3	2	4
CMT	6631	Chemistry 3 & Quantitative Analysis	4	4	6
XXX	XXXX	Technical Elective 1	2	3	3
			12	9	16
SIXTH TERM					
PHY	22XX	Physics Elective 3	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
COMM	102X	Communication Elective	3	0	3
MAT	1112	Statistics 2	3	0	3
CMT	6641	Instrumental Chemical Analysis 1: Spectroscopy	3	3	4
XXX	XXXX	Technical Elective 2	2	3	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			14	6	16
EIGHTH TERM					
CMT	6651	Instrumental Chemical Analysis 2: Chromatography	3	3	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	43	6
NINTH TERM					
ENG	10XX	English Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
CMT	6649	Chemical Technology Capstone	2	3	3
XXX	XXXX	Technical Elective 3	2	3	3
XXX	XXXX	Technical Elective 4	2	3	3
			12	9	15
TENTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			4	40	5
					109

Technical Electives: Choose 12 credit hours of Technical Electives from the following concentrations.
Environmental Engineering Technology: EVET 7607, EVET 7612, EVET 7616, EVET 7646, EVET 7671, EVET 7676, and EVET 7677
Organic Chemistry: CHE 2281, CHE 2282, CHE 2283, CHE 2284, CHE 2285, and CHE 2286
Biology, Biochemistry: BIO 4009, BIO 4081, BIO 4082, BIO 4083, and CHE 2233
Plastics: MET 7111, MET 7220, MET 7230, MET 7240
Biotechnology, Chemical Engineering Technology, and Food Science electives: See Advisor.
Physics Electives 1, 2 and 3: Choose one of the following blocks:
Calculus-based Physics: PHY 2295, PHY 2296, PHY 2297
Algebra-based Physics: PHY 2291, PHY 2292, PHY 2293
Algebra Elective: MAT 1152, MAT 1192
Communication Elective: COMM 1020, COMM 1024
Humanities/Social Science Elective: Any PSY, SOC, HST, PHI, ART, MUS, THE, CULT. Students pursuing Forensic Science choose from CRJ courses.
English Elective: ENG 1003, ENG 1010, ENG 1019
Economics Elective: Any ECO

Environmental Engineering Technology (EVET)

Program Chair: Ann Gunkel
Co-op Coordinator: Kathy McClusky
Advisor: Ann Fallon
The Environmental Engineering Technology program prepares its graduates to successfully enter and pursue baccalaureate degrees and to enter and advance professionally through technical and mid-management positions in local industry. Graduates are prepared to effectively sample, monitor, test, and evaluate environmental media and to effectively conduct assessments, minimize and treat waste, and ensure compliance with environmental regulations.

In the program, students gain skills in key environmental areas which include collecting soil and water samples, air monitoring, managing cleanup activities, complying with regulations, making recommendations concerning solid and hazardous waste manage-

ment, and performing laboratory testing. Graduates earn an Associate of Applied Science degree and are prepared to enter positions in environmental restoration sites, government agencies, laboratories, consulting firms, parks and forest services, conservation districts, and local industries. All curriculum courses meet the Ohio EPA requirements for license renewal except ET 9400.

The Environmental Engineering Technology program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone: (410) 347-7700.

Environmental Engineering Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CHE	2231	Fundamentals of General Chemistry	3	3	4
EVET	7607	Environmental Sampling	2	3	3
EVS	7622	Environmental Science: Conservation and Clean-up	3	2	4
EVET	7670	Regulations & Permits	2	3	3
			13	13	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	43	9
THIRD TERM					
MAT	11XX	Algebra Elective	4	0	4
EVET	7613	Environmental Surveying & Drafting	3	3	4
EVET	7616	Environmental Chemistry	2	3	3
EVS	7623	Environmental Geology	3	2	4
EVET	7675	Solid Waste Management	2	3	3
			14	11	18
FOURTH TERM					
COMM	102X	Communication Elective	3	0	3
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	42	9
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	11XX	Calculus Elective	4	0	4
CULT/ PHI	16XX	Social Science Elective 1	3	0	3
EVET	7676	Hazardous Waste Management	2	3	3
CET	7935	Introduction to CAD (CET)	2	3	3
			14	6	16
SIXTH TERM					
EVET	7605	Environmental Statistics	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
EVET	7612	Environmental Microbiology	3	3	4
EVET	7614	Basic Mechanics of Fluids	3	3	4
EVET	7646	Water & Wastewater Technology	3	2	4
EVET	7671	Air Pollution Control	3	3	4
			15	11	19
EIGHTH TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
NINTH TERM					
ECO	151X	Economics Elective	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EVET	7677	Treatment Technologies	2	3	3
EVET	XXXX	Technical Elective	2	3	3
			10	8	13
TENTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
XXX	XXXX	Social Science Elective 2	3	0	3
			4	40	5
					119

Technical Elective: Any EVET, EVS, CET. Other courses with program chair consent.
Social Science Elective 1: CULT 1648, PHI 1625
Social Science Elective 2: Any ECO, GEO, HST, LBR, POL, PSY, SOC, ART, CULT, FRN, SPN, LIT, MUS, PHI, THE
Communication Elective: COMM 1020, COMM 1023, COMM 1024
Algebra and Calculus Electives: MAT 1192 or MAT 1173 and MAT 1193; MAT 1192 and MAT 1154
English Elective: ENG 1010, ENG 1003
Physics: PHY 2295, PHY 2296, PHY 2297 may be substituted for PHY 2291, PHY 2292, PHY 2293
Economics Elective: ECO 1512, ECO 1513

Environmental Engineering Technology - Stormwater Management Major (EVETS)

The Environmental Engineering Technology - Stormwater Management major prepares its graduates in recent and emerging technologies dealing with stormwater control. As water quality regulations continue to become more stringent, it is critical that environmental engineers are educated about stormwater management practices, including those methods that target specific pollutants of concern in order to maximize overall benefits to the watershed of interest. Courses focus on environmental mapping, watershed management, stormwater management technologies and restoration ecology. Emphasizing long-term effectiveness and maintenance requirements of various stormwater management practices are stressed throughout the EVETS curriculum.

Environmental Engineering Technology - Stormwater Management Major

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CET	7935	Introduction to CAD (CET)	2	3	3
CHE	2231	Fundamentals of General Chemistry	3	3	4
EVET	7607	Environmental Sampling	2	3	3
EVS	7622	Environmental Science: Conservation and Clean-up	3	2	4
MAT	1191	Algebra and Trigonometry 1	3	2	4
			13	13	18
SECOND TERM					
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
ENG	1001	English Composition 1	3	0	3
			7	43	9
THIRD TERM					
EVET	7616	Environmental Chemistry	2	3	3
EVET	7626	Environmental Mapping	3	3	4
EVET	7670	Regulations & Permits	2	3	3
EVS	7623	Environmental Geology	3	2	4
MAT	11XX	Algebra Elective	4	0	4
			14	11	18

FOURTH TERM					
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
COMM	102X	Communication Elective	3	0	3
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
			7	42	9
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
EVET	7628	Watershed Management	2	3	3
EVET	7676	Hazardous Waste Management	2	3	3
MAT	11XX	Calculus Elective	4	0	4
XXX	XXXX	Social Science Elective 1	3	0	3
			14	6	16
SIXTH TERM					
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
			4	42	6
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
EVET	7612	Environmental Microbiology	3	3	4
EVET	7614	Basic Mechanics of Fluids	3	3	4
EVET	7646	Water & Wastewater Technology	3	2	4
XXX	XXXX	Stormwater Elective	2	3	3
			14	11	18
EIGHTH TERM					
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
EVET	7630	Stormwater Management	3	2	4
			4	42	6
NINTH TERM					
ECO	15XX	Economics Elective	3	0	3
EVET	7632	Stormwater Management Technologies	3	3	4
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
XXX	XXXX	Technical Elective	2	3	3
			11	8	14
TENTH TERM					
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
XXX	XXXX	Social Science Elective 2	3	0	3
			4	40	5
					119

Algebra & Calculus Elective: MAT 1192 or MAT 1173 and MAT 1193 or MAT 1154.
Communications Elective: COMM 1020, COMM 1024.
Physics: PHY 2295, PHY 2296, PHY 2297 may be substituted for PHY 2291, PHY 2292, PHY 2293.
Stormwater Elective: CET 7947, CET 7949, EVET 7619, EVET 7620, EVET 7625, LH 3501, LH 3560, LH 3561, LH 3563, LH 3565, other as approved by the Program Chair.
Social Science Elective 1: CULT 1648, PHI 1625.
Social Science Elective 2: Any ECO, GEO, HST, LBR, POL, PSY, SOC, ART, CULT, FRN, GRM, SPN, LIT, MUS, PHI, THE .
Technical Elective: Any EVET, EVS, CET, CMT, or as approved by the Program Chair.

Environmental Engineering Technology - Water and Wastewater Major (EVETW)

The Environmental Engineering Technology – Water and Wastewater major prepares its graduates to assist in the design, operation, and maintenance of water and wastewater treatment facilities.

The Water and Wastewater major emphasizes water and wastewater treatment in addition to the operation and design of these facilities. Courses focus on biological as well as physical-chemical treatment processes, collection and distribution systems, calculations for water and wastewater personnel, safety, statistics, quality assurance/quality control, and supervisory management. These courses assist in preparation for certification exams and meet continuing education requirements for the renewal of state operator licenses. All curriculum courses meet the Ohio EPA requirements for license renewal except ET 9400. Graduates earn an Associate of Applied Science degree.

The Environmental Engineering Technology-Water and Wastewater Major is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone: (410) 347-7700.

Environmental Engineering Technology - Water and Wastewater Major

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
CHE	2231	Fundamentals of General Chemistry	3	3	4
EVET	7607	Environmental Sampling	2	3	3
EVET	7670	Regulations & Permits	2	3	3
			13	11	17
SECOND TERM					
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	43	6
THIRD TERM					
MAT	11XX	Algebra Elective	4	0	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
EVET	7613	Environmental Surveying & Drafting	3	3	4
EVET	7616	Environmental Chemistry	2	3	3
EVET	7646	Water & Wastewater Technology	3	2	4
			15	10	19
FOURTH TERM					
EVET	7602	Supervisory Management in the Environmental Field	3	2	4
EVET	764X	Calculations for Operators Elective	2	3	3
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			1	40	2
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
COMM	102X	Communication Elective	3	0	3
MAT	11XX	Calculus Elective	4	0	4
CULT /PHI	16XX	Social Science Elective 1	3	0	3
EVET	7648	Utilities Safety & Security	3	2	4
CET	7935	Introduction to CAD (CET)	2	3	3
			18	5	20
SIXTH TERM					
EVET	7605	Environmental Statistics	3	2	4
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
EVET	7612	Environmental Microbiology	3	3	4
EVET	7614	Basic Mechanics of Fluids	3	3	4
			12	8	15
EIGHTH TERM					
EVET	7647	Collection & Distribution Systems	2	3	3
CIT	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			3	43	5

NINTH TERM					
ECO	151X	Economics Elective	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EVET	7677	Treatment Technologies	2	3	3
EVET	76XX	Technical Elective	2	3	3
XXX	XXXX	Social Science Elective 2	3	0	3
			13	8	16
TENTH TERM					
EVET	760X	Operations of Treatment Plants Elective	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
					119

All curriculum courses meet the Ohio EPA requirements for license renewal except PHI 1625 and CIT 9400.
Calculations for Operators Elective: EVET 7643 or EVET 7644
Operations of Treatment Plants Elective: EVET 7603 or EVET 7604
Algebra and Calculus Electives: MAT 1192 or MAT 1173 and MAT 1193; MAT 1192 and MAT 1154
Social Science Elective 1: CULT 1648, PHI 1625
Social Science Elective 2: Any ECO, GEO, HST, LBR, POL, PSY, SOC, ART, CULT, FRN, SPN, LIT, MUS, PHI, THE
Technical Elective: Any EVET, EVS, CET Other courses with program chair consent
Communication Electives: COMM 1020, COMM 1023, COMM 1024
Physics Electives: PHY 2295, PHY 2296, PHY 2297 may be substituted for PHY 2291, PHY 2292, PHY 2293
English Elective: ENG 1010, ENG 1003
Economics Elective: ECO 1512, ECO 1513

Environmental Safety and Security Certificate (EVETSC)

The Environmental Safety and Security certificate develops skills that can be utilized in various fields associated with protecting the nation during natural disasters and in the event of terrorist or wartime attack. These careers fall under the areas of disaster preparedness, utilities safety and security, transportation safety and security, law enforcement, and research. Additionally, this certificate meets needs of business, government, and educational leaders to prepare staff to ensure the safety of their personnel.

Environmental Safety and Security Certificate

			Hours Per Week Class	Lab	Credit Hours
EVET	7607	Environmental Sampling	2	3	3
EVET	7648	Utilities Safety and Security	3	2	4
EVET	7672	Advanced Sampling & Analysis	2	3	3
EVET	7676	Hazardous Waste Management	2	3	3
EVET	7681	Advanced Environmental Risk Assessment	3	3	4
EVET	7682	Materials Transportation Safety and Security	3	0	3
EVET	7683	Environmental Impact of Weapons of Mass Destruction	2	2	3
			17	16	23
					23

Civil Engineering Technologies Department

Program Chair: Tom Burns, PhD, PE
Co-op Coordinator: Noelle Grome
Advisors: George Armstrong, PE, PS, John Buttelwerth, James Decker, PS, Elias Feghali, Ralph Wells
The Civil Engineering Technologies Department offers a degree program with three majors, and several certificate programs.

Civil Engineering Technology is a single program from which students may select one of three majors: architectural, construction management, or surveying. The CET program prepares its graduates to successfully enter and advance professionally through technical and management positions in local industry, and to pursue baccalaureate degrees.

Evening courses are available for students who work full-time. These students may earn an associate's degree in the evening in approximately three years while attending class only two nights per week.

The Civil Engineering Technology program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone: (410) 347-7700 and has received an Ohio Board of Regents Program Excellence Award. Additionally, the Construction Management major has earned accreditation from the American Council for Construction Education (ACCE) making it the only program in the United States to hold both accreditations.

The Civil Engineering Technologies Department offers four certificate programs. The Construction Safety Specialist certificate is a stand-alone program offering comprehensive education for industry personnel interested in developing safety management expertise. The Sustainable Design and Construction certificate offers advanced design and construction courses that emphasize sustainable techniques based on the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) criteria to graduates and students of two-year civil engineering programs. The Advanced Surveying certificate is for graduates of the two-year Surveying program and serves as the third year of a bachelor's degree program offered by Northern Kentucky University. The Land Surveying certificate is for graduates of baccalaureate civil engineering programs who wish to qualify for the examinations to obtain registration as a professional surveyor in Ohio.

Architectural Major (CETA)

The CET-Architectural major prepares graduates to bridge the gap between architect and design engineer by assisting in the design of architectural, mechanical, electrical, and lighting systems for buildings.

To prepare students for the current needs of the profession, the architectural technology curriculum features a heavy emphasis on mechanical systems, water, waste, electrical, lighting systems, CAD, and building information modeling. In addition, the program instructs students in the areas of construction methods and principles, architectural drafting and design, and structural design involved in building construction. Job titles for graduates may include: architectural designer/detailer, mechanical designer/detailer, electrical designer/detailer, and CAD technician manager.

Civil Engineering Technology - Architectural Major

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CET	7024	Architectural Drafting	3	4	4
CET	7910	Surveying Measurements	3	2	4
CET	7913	Introduction to Civil Engineering Technologies	0	2	1
CET	7935	Introduction to CAD (CET)	2	3	3
			11	13	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CET	7915	OSHA 10-Hour Construction Safety	0	2	1

CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
THIRD TERM					
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
CET	7025	Site Drafting	2	3	3
CET	7926	Building Codes	1	3	2
CET	7927	CAD 1 (CET)	2	3	3
CET	7934	Statics (CET)	2	3	3
			11	12	15
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
CET	7026	Architectural Design	2	5	4
CET	7928	CAD 2 (CET)	1	6	3
CET	7944	Strength of Materials (CET)	3	2	4
			13	13	18
SIXTH TERM					
LBR	1535	Introduction to Labor/ Management Relations	3	0	3
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8
SEVENTH TERM					
CET	7929	3-D Modeling 1: REVIT Architecture	2	3	3
CET	7956	Structural Steel Design	3	2	4
CET	7964	Mechanical Systems	2	3	3
CET	7968	Lighting Systems	2	3	3
ECO	151X	Economics Elective	3	0	3
			12	11	16
EIGHTH TERM					
ENG	1010	Technical Writing 1	3	0	3
COMM	1020	Public Speaking	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8
NINTH TERM					
CET	7932	3-D Modeling 2: REVIT MEP	2	3	3
CET	7936	HVAC Design Systems	3	2	4
CET	7954	Reinforced Concrete Design	3	2	4
CET	7963	Electrical Design Systems	3	2	4
CET	7969	Building Systems Design	3	5	5
			14	13	20
TENTH TERM					
PHY	229X	Physics Elective	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
					119

Economics Elective: ECO 1512, ECO 1513
Physics Elective: PHY 2292, PHY 2293

Construction Management Major (CETC)

The CET-Construction Management major prepares graduates to enter the construction industry at the management level, applying knowledge of building methods and materials; structural fundamentals; and project estimating, scheduling, and management. Early in the curriculum students learn about construction materials and methods, manual and computer-aided architectural drafting, survey drafting, elements of structures, and light construction principles. They learn structural fundamentals through the four-course sequence of statics, strength of materials, structural steel design, and reinforced concrete. Later, they investigate principles of construction management such as project control, scheduling, estimating, project safety, contracting, heavy construction, value engineering, and labor relations. Students use leading CAD, BIM, scheduling, and estimating software in many courses. Graduates may be employed as project estimators, project schedulers, assistant project managers, construction layout specialists, or senior civil technicians.

Civil Engineering Technology - Construction Management Major

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CET	7024	Architectural Drafting	3	4	4
CET	7910	Surveying Measurements	3	2	4
CET	7913	Introduction to Civil Engineering Technologies	0	2	1
CET	7935	Introduction to CAD (CET)	2	3	3
			11	13	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CET	7915	OSHA 10-Hour Construction Safety	0	2	1
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
THIRD TERM					
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
CET	7025	Site Drafting	2	3	3
CET	7927	CAD 1 (CET)	2	3	3
CET	7934	Statics (CET)	2	3	3
CET	7943	Construction Estimating	2	3	3
			12	12	16
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
CET	7921	Construction Surveying	2	3	3
CET	7931	Light Construction	3	2	4
CET	7944	Strength of Materials (CET)	3	2	4
			15	7	18
SIXTH TERM					
ECO	151X	Economics Elective	3	0	3
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8
SEVENTH TERM					
CET	7941	Computer Integrated Construction	1	5	3
CET	7942	Construction Management 1	2	3	3
CET	7945	Cost Engineering	2	3	3
CET	7946	Construction Scheduling	2	3	3
CET	7956	Structural Steel Design	3	2	4
			10	16	16
EIGHTH TERM					
COMM	1020	Public Speaking	3	0	3
LBR	1535	Intro to Labor/Management Relations	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8

NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
MGT	2929	Construction Business Practices	4	0	4
CET	7953	Construction Management 2	2	4	4
CET	7954	Reinforced Concrete Design	3	2	4
CET	7955	Building Information Models (BIM)	3	2	4
			15	8	19
TENTH TERM					
PHY	29XX	Physics Elective	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
					119

Economics Elective: ECO 1512, ECO 1513
Physics Elective: PHY 2292, PHY 2293

Construction Safety Specialist Certificate (CETCSC)

The Construction Safety Specialist certificate is a 23-credit hour program designed to meet the needs of construction field supervisors, managers, and engineers who will manage and oversee project safety. The certificate is a stand-alone training program for construction personnel in need of safety training for their success or desiring new opportunities within this field. The certificate prepares students for the American Society of Safety Engineers (ASSE) Construction Health & Safety Technician (CHST) national board exam. Many courses within the certificate apply to the Building Technology, Construction Management, and Construction Safety major of the Public Safety Technology degree program offered by the Health and Public Safety Division.

Construction Safety Specialist Certificate

			Hours Per Week Class	Lab	Credit Hours
CET	7020	Safety Training Module	1	0	1
CET	7971	Construction Health & Safety 1	3	0	3
CET	7972	Construction Health & Safety 2	3	0	3
CET	7973	Construction Risk Management & Insurance 1	3	0	3
CET	7974	Construction Safety Plan Management	3	0	3
CET	7975	Environmental Issues in Construction	3	0	3
CET	7976	Construction Safety Law	4	0	4
CET	7977	Construction Risk Management & Insurance	3	0	3
			23	0	23
					23

Sustainable Design and Construction Certificate (CETSDC)

The Sustainable Design and Construction certificate offers advanced design and construction courses that emphasize sustainable techniques based on the United States Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) criteria.

This certificate serves as the third year of a Bachelor of Science degree program in Construction Management with an emphasis on Sustainable Design and Construction from Northern Kentucky University. The degree is currently awaiting approval.

Admission into the certificate program requires completion of the Civil Engineering Technology department's Architectural or Construction Management major or other equivalent coursework as approved by the certificate advisor.

Sustainable Design and Construction Certificate

Program admission requirements: Associate's degree in Civil Engineering Technologies, majoring either in Architectural Design or Construction Management CET 7929, CET 7931, CET 7955, and CET 7969

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CET	7983	Sustainable Design in HVAC Systems	3	2	4
CET	7984	Sustainable Design in Lighting Systems	2	3	3
CET	7985	Alternative Energy Sources	2	3	3
			7	8	10
SECOND TERM					
CET	7986	Sustainable Site Design	2	3	3
CET	7987	Energy Audits of Existing Buildings	2	3	3
CET	7988	Construction Practices for LEED Certification	3	2	4
CET	7989	Facilities Management for LEED Certification	3	2	4
			10	10	14
THIRD TERM					
CET	7960	Architectural Design for LEED Certification	3	2	4
CET	7961	Commissioning and Decommissioning Building Systems	3	2	4
			6	4	8
FOURTH TERM					
CET	7962	Commissioning Energy Management Systems	3	2	4
CET	7967	Energy Modeling of Buildings	3	2	4
			6	4	8
FIFTH TERM					
CET	7970	Management of Construction Projects for LEED Certification	3	2	4
CET	7980	Preparing for the LEED Accredited Professional Exam	3	0	3
			6	2	7
					47

Surveying Major (CETS)

The CET-Surveying major prepares graduates to effectively operate surveying equipment and computer software to design subdivisions and site plans, and to effectively conduct topographical and boundary surveys utilizing conventional equipment and global positioning satellites for data acquisition. Students train using state-of-the-art electronic surveying and computing equipment to learn instrument usage, computer graphics, document research and resolution, route design, control surveying, subdivision planning, satellite positioning (GPS), and geographic information systems (GIS). Professional surveyors are called upon to perform diverse tasks such as designing subdivisions, retracing original boundary lines, laying out construction projects, preparing legal descriptions, and orienting communications systems. Possible job titles for graduates include: survey crew chief, computer mapping technician, construction layout specialist, and GIS-GPS technician.

Civil Engineering Technology - Surveying Major

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
CET	7024	Architectural Drafting	3	4	4
CET	7910	Surveying Measurements	3	2	4
CET	7913	Intro to Civil Engineering Tech.	1	2	2
CET	7935	Introduction to CAD (CET)	2	3	3
			12	13	17
SECOND TERM					
ENG	1001	English Composition 1	3	0	3

CET	7915	OSHA 10-Hour Construction Safety	0	2	1
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
THIRD TERM					
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
CET	7025	Site Drafting	2	3	3
CET	7920	Surveying Calculations	2	3	3
CET	7927	CAD 1 (CET)	2	3	3
CET	7934	Statics (CET)	2	3	3
			12	12	16
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
CET	7921	Construction Surveying	2	3	3
CET	7930	Route Surveying	4	2	5
CET	7944	Strength of Materials (CET)	3	2	4
			16	7	19
SIXTH TERM					
ECO	1513	Macroeconomics	3	0	3
CULT	1648	Social Issues in Technology	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	40	8
SEVENTH TERM					
ENG	1010	Technical Writing 1	3	0	3
CET	7940	Elements of Land Surveying 1	3	3	4
CET	7947	Drainage Control Systems	3	2	4
CET	7948	Subdivision Design 1	2	3	3
CET	7949	Geographic Information Systems 1	3	2	4
			14	10	18
EIGHTH TERM					
COMM	1020	Public Speaking	3	0	3
LBR	1535	Intro to Labor/Management Relations	3	0	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			7	40	8
NINTH TERM					
CET	7950	Surveying Field Project	1	6	3
CET	7958	Control Surveying	1	6	3
CET	7959	Subdivision Design 2	2	3	3
CET	7991	Elements of Land Surveying 2	3	3	4
CET	79XX	Technical Elective	3	2	4
			10	20	17
TENTH TERM					
PHY	29XX	Physics Elective	3	2	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			4	42	6
					121

Physics Elective: PHY 2292, PHY 2293
Technical Elective: CET 7928, CET 7929, CET 7942

Advanced Surveying Certificate (ASC)

The Advanced Surveying certificate is for graduates of the Surveying major, and serves as the third year of a bachelor's degree program with Northern Kentucky University. Advanced surveying courses in GIS, GPS, and legal topics are offered via distance learning. This cooperative venture with NKU is approved by the State Boards of Registration in Ohio, Indiana, and Kentucky. Students should check with their state licensing board for changes to specific requirements before taking any course work. Graduates of other CET surveying or related associate's degree programs are required to complete all prerequisite material in the Cincinnati State Civil Engineering Technologies - Surveying major prior to acceptance into the certificate. Students who wish to transfer credits must meet with the certificate advisor.

Advanced Surveying Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HST	1568	American History 1	3	0	3
CET	7993	Surveying Laws and Ethics	3	0	3
			6	0	6
SECOND TERM					
CET	7992	Elements of Land Surveying 3	3	2	4
CET	7994	Statistics for Surveying Applications	3	0	3
			6	2	7
THIRD TERM					
BUS	2925	Business Principles	3	0	3
CET	7990	Advanced Survey Calculations	3	2	4
			6	2	7
FOURTH TERM					
ACC	2926	Financial Accounting 1	3	2	4
CET	7981	Geographical Information Systems 2	3	2	4
			6	4	8
FIFTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
CET	7982	Global Positioning Systems for Surveying	4	0	4
			7	0	7
					35

Land Surveying Certificate (LSC)

The Land Surveying certificate is designed for graduates and students of four-year civil engineering programs who wish to qualify for the examinations to obtain registration as a professional surveyor in the State of Ohio. The Ohio State Board of Registration for Professional Engineering and Surveyors requires graduates from an approved four-year civil engineering program to successfully complete 24 quarter hours in surveying and mapping arts and sciences to become eligible for registration. The LSC certificate satisfies this requirement and is approved by the Ohio State Board of Registration for Professional Engineers and Surveyors.

Land Surveying Certificate

Certificate admission requirements: Enrolled in or graduate of a four-year Civil Engineering program.

			Hours Per Week Class	Lab	Credit Hours
CET	7930	Route Surveying	4	2	5
CET	7940	Elements of Land Surveying 1	3	3	4
CET	7951	Surveying History: OH, IN, KY	3	0	3
CET	7958	Control Surveying	1	6	3
CET	7990	Advanced Survey Calculations	3	2	4
CET	7991	Elements of Land Surveying 2	3	3	4
CET	7992	Elements of Land Surveying 3	3	2	4
CET	7993	Surveying Laws and Ethics	3	0	3
			23	18	30
					30

Building Technology (BLD)

Building Technology is an associate's degree program designed specifically for members of the construction industry who want to apply their apprenticeship education, other post-secondary education, or work experience toward an associate's degree. Students may receive up to 45 credit hours, nearly half of the degree requirement, for this related education or experience. The remainder of the curriculum includes courses selected from the Civil

Engineering Technology Construction Management major, the Construction Safety Specialist certificate, the Sustainable Design and Construction certificate, or other courses approved by the program chair. The program is available both day and evening.

Building Technology

Students in this degree program must be enrolled in a building trade apprenticeship program.

			Hours Per Week Class	Lab	Credit Hours
XXX	XXXX	Technical Elective	2	3	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
XXX	XXXX	Technical Elective	2	3	3
XXX	XXXX	Technical Elective	2	3	3
XXX	XXXX	Technical Elective	2	3	3
BLD	7099	Building Technology Studies	45	0	45
CET	7942	Construction Management 1	2	3	3
CET	7943	Construction Estimating	2	3	3
CET	7946	Construction Scheduling	2	3	3
ENG	1001	English Composition 1	3	0	3
ENG	1002	English Composition 2	3	0	3
ENG	1010	Technical Writing 1	3	0	3
ENG	1171	Technical Mathematics 1	4	0	4
COMM	1020	Public Speaking	3	0	3
			84	21	91
					91

Computer Software Development Department

The Computer Software Development Department offers degree programs in Computer Programming and Database Management, Software Engineering Technology, and Business Information Systems.

Business Information Systems Technology (BIS)

Program Chair: Robert Nields
Co-op Coordinator:
The Business Information Systems program focuses on the application of information technology (IT) in business. BIS provides the knowledge and skills necessary for its graduates to provide an essential IT role in a business environment by designing and implementing mission-critical applications and infrastructure.

The BIS curriculum provides graduates with the necessary business fundamentals, analytical skills, software development skills, and the following core technical skills to succeed as an IT professional.

- Java (2 courses)
- JavaServer Pages (JSP) (2 Courses)
- PHP and MySQL (2 courses)
- .NET Programming (2 courses)
- Database Design, Implementation, and Management (3 courses)
- Visual Web Developer based HTML, JavaScript, and XML
- RPG (2 courses)
- Cross Platform Development Environment and Operating Systems including:
  - .NET
  - Lineux
  - IBM iSeries and Power Systems
- Capstone Design Project (2 courses)
- Cooperative Education

The combination of cooperative education and capstone design courses allow students to expand their technical, business, team, leadership, and communication skills through real business case studies and projects supplied by local employers.

The BIS program is a certified IBM Academic Initiative program. This innovative program partners IBM with BIS and its students to aide in building a pipeline of skilled IT Professionals.

Business Information Systems Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
IT	5201	Information Technology Concepts	2	3	3
IT	5255	Internet Programming: HTML	2	3	3
IT	5291	Visual BASIC 1	2	3	3
IT	5320	Database Design and SQL	2	3	3
CIT	9350	Introduction to Computer Software Development Careers	1	1	1
			12	13	16
SECOND TERM					
BUS	2925	Business Principles	3	0	3
IT	5230	Introduction to IBM System i	2	3	3
IT	5292	.NET Programming 2	2	3	3
IT	5311	IBM DB2 SQL Programming 1	2	3	3
			9	9	12
THIRD TERM					
ACC	2926	Financial Accounting 1	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
FOURTH TERM					
IT	5207	Systems Analysis and Design 1	2	3	3
IT	5271	Java 1	2	3	3
IT	5312	IBM DB2 SQL Programming 2	2	3	3
IT	5334	PHP Hypertext Preprocessor and MySQL	2	3	3
ENG	1002	English Comp 2	3	0	3
			11	12	15
FIFTH TERM					
ACC	2927	Financial Accounting 2	2	2	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	42	5
SIXTH TERM					
IT	5272	Java 2	2	3	3
IT	5233	Command Language 1 (CL 1)	2	3	3
MAT	1151	Intermediate Algebra	3	2	4
IT	5247	Systems Analysis & Design 2	2	3	3
IT	5335	PHP Hyper Text Preprocessor and MySQL	2	3	3
			11	14	16
SEVENTH TERM					
ECO	1512	Microeconomics	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
EIGHTH TERM					
ENG	1003	English Composition 3	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
ECO	1513	Macroeconomics	3	0	3
IT	5266	RPG 1	2	3	3
IT	5273	Java 3	2	3	3
			13	6	15
NINTH TERM					
IT	5351	BIS Design Project 1	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
TENTH TERM					
COMM	1020	Public Speaking	3	0	3
IT	5274	Java 4	2	3	3
IT	5333	Internet Programming: XML	2	3	3

IT	5352	BIS Design Project 2	2	3	3
IT	5267	RPG 2	2	3	3
			11	12	15
					110

Computer Programming and Database Management (CPDM)

Program Chair: Donald M. Youngpeter, PE
Co-op Coordinator:
Computer Programming and Database Management is the only program of its kind where nearly all of the curriculum is available online, taught entirely via the Internet. The online courses consist of short, easy to follow, Internet-based videos. This advanced online course delivery system provides students with the flexibility to quickly complete degree requirements at home or at the office.

Utilizing state-of-the-art programming languages and database technologies, the CPDM degree program exceeds corporate employment requirements by preparing students to design, program, and administer e-business and e-commerce systems on the Internet. The software and programming languages used throughout this curriculum include C# and Visual Basic on the .NET platform, Microsoft SQL Server, Crystal Reports, HTML, PHP and MySQL, Classic ASP, JavaScript, and XML.

Examples of core curriculum courses include:
- ASP.NET Programming with Visual Basic (5 courses)
- ASP.NET Programming with C# (2 courses)
- PHP and MySQL
- Microsoft SQL Server Database (2 courses)
- Visual Web Developer based HTML, JavaScript, Classic ASP, and XML
- Capstone Design Project (3 courses)
- Cooperative Education

The combination of cooperative education and capstone design courses allows students to expand their technical, business, and communications skills through real business case studies and projects, often supplied by local employers.

Jobs in this field are fast paced, highly technical, and highly paid. Graduates earn an Associate of Applied Science degree.

Job titles for graduates include .NET Web developer/programmer, computer programmer/analyst, database systems programmer/analyst, or senior IT programmer/analyst

Computer Programming and Database Management

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
IT	5201	Information Technology Concepts	2	3	3
IT	5255	Internet Programming: HTML	2	3	3
IT	5291	.NET Programming 1	2	3	3
IT	5320	Database Design and SQL	2	3	3
IT	9350	Introduction to Computer Software Development Careers	1	1	1
			12	13	16
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
IT	5283	ASP.NET Programming with C# 1	2	3	3
IT	5292	.NET Programming 2	2	3	3
IT	5321	Database Programming & Administration: SQL Server 1	2	3	3
IT	5334	PHP Hypertext Preprocessor and MySQL	2	3	3
			11	12	15
THIRD TERM					
ENG	1003	English Composition 3	3	0	3
IT	5284	ASP.NET Programming with C# 2	2	3	3
IT	5293	.NET Programming 3	2	3	3
IT	5335	PHP Hypertext Preprocessor and MySQL 2	2	3	3
			9	9	12
FOURTH TERM					
IT	5207	Systems Analysis and Design 1	2	3	3
IT	5294	.NET Programming 4	2	3	3
IT	5322	Database Programming & Administration: SQL Server 2	2	3	3
PSY	1505	Introduction to Psychology 1	3	0	3
			9	9	12
FIFTH TERM					
IT	5295	.NET Programming 5	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SIXTH TERM					
ECO	1512	Microeconomics	3	0	3
IT	5247	Systems Analysis & Design 2	2	3	3
IT	5329	Data Reporting: Crystal Reports	2	3	3
IT	5331	Internet Programming: ASP	2	3	3
			9	9	12
SEVENTH TERM					
ECO	1513	Macroeconomics	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
EIGHTH TERM					
MAT	1151	Intermediate Algebra	3	2	4
IT	5325	Database Administration 1	2	3	3
IT	5332	Internet Programming: JavaScript	2	3	3
IT	5361	CPDM Design Project 1	2	3	3
			9	11	13
NINTH TERM					
IT	5362	CPDM Design Project 2	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
TENTH TERM					
COMM	1023	Interpersonal Communication	3	0	3
MAT	1111	Statistics 1	2	2	3
IT	5333	Internet Programming: XML	2	3	3
IT	5363	CPDM Design Project 3	2	3	3
			9	8	12
					107

Software Engineering Technology (SET)

Program Chair: Steve Yelton, PE
Co-op Coordinator:
Advisors: Pat Callahan and Linda Pohlgeers
The Software Engineering Technology program emphasizes skills needed to design, develop, implement, and maintain computer operating systems and software using industry-standard programming languages. The SET program also includes study in the areas of Visual C, Visual Basic, Internet programming, and database applications.

Students who complete the program earn an Associate of Applied Science degree and are prepared to continue their education in bachelor's degree programs in Computer Science or Computer Engineering.

Cooperative education is an integral part of the Software Engineering Technology program and is used to reinforce skills learned in the classroom.

Job titles for graduates include systems analyst, programmer/ana-

lyst, operating system analyst, software designer, software applications specialist, test specialist, or software applications support specialist.

Software Engineering Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
IT	5255	Internet Programming: HTML	2	3	3
IT	5291	.NET Programming 1	2	3	3
IT	5320	Database Design and SQL	2	3	3
IT	9350	Introduction to Computer Software Development Careers	1	1	1
			13	12	17
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
IT	5275	C++ Programming 1	3	3	4
IT	5292	.NET Programming 2	2	3	3
IT	5332	Internet Programming: JavaScript	2	3	3
EET	7701	Electronic Fundamentals 1	3	3	4
			13	12	17
THIRD TERM					
COMM	1020	Public Speaking	3	0	3
MAT	1192	Algebra and Trigonometry 2	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	42	9
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
IT	5276	C++ Programming 2	3	3	4
IT	5293	.NET Programming 3	2	3	3
IT	5321	Database Programming & Administration: SQL Server 1	2	3	3
			10	11	14
FIFTH TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
SIXTH TERM					
IT	5271	Java 1	2	3	3
IT	5277	Object Oriented Programming: C++	3	3	4
IT	5294	.NET Prorgamming 4	2	3	3
IT	5331	Internet Programming: ASP	2	3	3
MAT	1193	Technical Calculus	4	0	4
			13	12	17
SEVENTH TERM					
ECO	1512	Microeconomics	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
EIGHTH TERM					
ENG	1003	English Composition 3	3	0	3
MGT	2996	Project Management	3	0	3
IT	5278	Visual C++ Programming 1	3	3	4
IT	5295	.NET Prorgamming 5	2	3	3
IT	5272	Java 2	2	3	3
			13	9	16
NINTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
TENTH TERM					
ECO	1513	Macroeconomics	3	0	3
IT	5322	Database Programming & Administration: SQL Server 2	2	3	3
IT	5380	Software Engineering Technology Project	2	3	3
			7	6	9
					115

Electrical Engineering Technologies Department

Program Chair: Steven J. Yelton, PE

The Electrical Engineering Technologies Department includes degree programs in Electronics Engineering Technology, Electro-Mechanical Engineering Technology, Biomedical Equipment & Information Systems Technology, PC Support and Administration Technology, and Power Systems Engineering Technology; majors in Renewable Energy and Energy Efficiency, Smart Grid, and Laser; and certificate programs in Computer Repair, Smart Grid, and Renewable Energy and Energy Efficiency.

Biomedical Equipment & Information Systems Technology (BMET)

Program Chair: Steven J. Yelton, PE
Co-op Coordinator: Sue Dolan
Advisors: Bob McLain, Linda Pohlgeers

The Biomedical Equipment and Information Systems Technology program prepares graduates to successfully enter and pursue baccalaureate degrees, to enter and advance professionally through technical and mid-management positions in local hospitals and industry, and to effectively install, calibrate, and repair biomedical equipment and information systems.

BMT students gain skills in electronics, computer networking, computer software, and medical instrumentation. Graduates may find employment in hospitals, medical equipment companies, and electronics firms. Potential job titles include biomedical technician, information systems technician, and engineering technician.

Students pursuing an associate's degree in BMT are required to hold on-site, related, paid cooperative education positions in order to meet graduation requirements. Exceptions to this policy may be permitted with the approval of the co-op coordinator and the program chair of the BMT major.

The Biomedical Equipment and Information Systems Technology program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone (410) 347-7700. The BMET curriculum provides students with an effective mechanism to transfer into a BMET or EET bachelor's degree program which are related bachelor's degree for BMET graduates to pursue.

Biomedical Equipment & Information Systems Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
EET	7728	Digital Combinational Logic	3	3	4
BMT	7739	Introduction to Biomedical Information Systems and Technology	2	3	3
			16	11	20

SECOND TERM					
ENG	1002	English Composition 2	3	0	3
ET	9300	Technology Career Preparation	1	1	1
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			5	41	6
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	3	2	4
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
EET	7738	Digital Sequential Logic	3	3	4
			14	11	18
FOURTH TERM					
BIO	4073	Concepts of Biology 3	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
EET	7730	Electronics 1	5	3	6
EET	7748	Microprocessor Systems 1	3	3	4
CHE	22XX	Chemistry Elective	3	3	4
			15	9	18
SIXTH TERM					
IT	5151	Network Communications 1	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	15XX	Economics Elective	3	0	3
EET	7740	Electronics 2	5	3	6
BMT	7749	Biomedical Instrumentation 1	3	5	5
			14	8	17
EIGHTH TERM					
IT	5152	Network Communications 2	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EET	7750	Electronics 3	3	3	4
BMT	7759	Biomedical Instrumentation 2	3	5	5
			15	10	19
TENTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
					119

Chemistry Elective: CHE 2202, CHE 2231
Economics Elective: ECO 1512, ECO 1513

Electronics Engineering Technology (EET)

Program Chair: Steven J. Yelton, PE
Co-op Coordinator: Sue Dolan
Advisors: Bob McLain, Linda Pohlgeers

The Electronics Engineering Technology program prepares graduates to successfully enter and pursue baccalaureate degrees, to enter and advance professionally through technical and mid-management positions in local industry, and to effectively install, calibrate, and repair electronic equipment.

Electronics Engineering Technology includes studies in analog and digital electronics; computer system hardware and software design and testing; and computer repair and instrumentation. Coursework covers the theory and application of electronic systems and computer systems including time spent in labs fully equipped for electronic or computer design and applications.

Job titles for graduates may include: applications technician, computer hardware technician, software specialist, service technician, engineering technician, communications technician, or field service technician. Graduates of the EET program also fill traditional electronics technician positions. With some additional study, graduates may also become certified as computer technicians, electronics technicians, and network technicians.

Students pursuing a two-year associate's degree in EET are required to hold on-site, related, paid cooperative education positions in order to meet graduation requirements. Exceptions to this policy may be permitted with the approval of the cooperative education coordinator.

The Electronics Engineering Technology program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone (410) 347-7700. The EET curriculum provides students with an effective mechanism to transfer into an EET bachelor's degree program.

Electronics Engineering Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
EET	7728	Digital Combinational Logic	3	3	4
ET	9300	Technology Career Preparation	1	1	1
			15	9	18
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	3	2	4
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
EET	7738	Digital Sequential Logic	3	3	4
			14	11	18
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
EET	7730	Electronics 1	5	3	6
EET	7748	Microprocessor Systems 1	3	3	4
EMT	7755	Motors, Motor Controls and Variable Drives	3	3	4
			15	9	18
SIXTH TERM					
IT	5151	Network Communications 1	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5

SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	15XX	Economics Elective	3	0	3
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
EET	7740	Electronics 2	5	3	6
EET	7768	Microprocessor Systems 2	3	3	4
			17	8	20
EIGHTH TERM					
IT	5152	Network Communications 2	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
EET	7750	Electronics 3	3	3	4
EET	7751	EET Design Project	3	3	4
			15	8	18
TENTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
					118

Economics Elective: ECO 1512, ECO 1513

Electro-Mechanical Engineering Technology (EMET)

Program Chair: Larry Feist
Co-op Coordinator: Kim Richards
Advisor: Mike Carroll

The Electro-Mechanical Engineering Technology program prepares graduates to successfully enter and pursue baccalaureate degrees, to enter and advance professionally through technical and mid-management positions in local industry, and to effectively install, maintain, troubleshoot, and test industrial equipment in an automated manufacturing environment. The program combines the study of mechanical systems used in industry and the electronic systems that control them. The curriculum includes theory and application of analog and digital electronics and devices, electric motors and controls, computer control applications/programming, industrial hydraulic and pneumatic systems, mechanisms and machine drives, programmable logic controllers, servomechanisms, variable speed drives, and robotics.

Graduates are equipped to enter diverse positions such as: robotics/automation technician, field service technician, maintenance technician, process control/instrumentation technician, and similar fields. Many EMET graduates continue their education after earning an associate's degree from Cincinnati State. Articulation agreements simplify credit transfer to local colleges.

The Electro-Mechanical Engineering Technology program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone (410) 347-7700 and has received an Ohio Board of Regents Program Excellence Award.

Electro-Mechanical Engineering Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	11XX	Math Elective 1	3	2	4
MET	7310	Manufacturing Processes with CNC Programming	2	3	3
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
EET	7728	Digital Combinational Logic	3	3	4
			13	11	17
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	11XX	Math Elective 2	3	2	4
PHY	22XX	Physics Elective 1	3	2	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
EET	7738	Digital Sequential Logic	3	3	4
			14	10	18
FOURTH TERM					
CET	7935	Introduction to CAD (CET)	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
PHY	22XX	Physics Elective 2	3	2	4
MET	7145	Statics and Strength of Materials	2	3	3
EET	7730	Electronics 1	5	3	6
EMT	7755	Motors, Motor Controls and Variable Drives	3	3	4
			16	11	20
SIXTH TERM					
MET	7125	Visual BASIC (MET)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
SEVENTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
MET	7132	Hydraulics & Pneumatics 1	2	3	3
MET	7141	Kinematics & Dynamics of Machines	3	2	4
EMT	7146	Electro-Mechanical Controls 1 (Programmable Controllers-PLCs)	3	3	4
XXX	XXXX	Technical Elective	2	3	3
			13	11	17
EIGHTH TERM					
MAT	11XX	Math Elective 3	4	0	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			5	40	6
NINTH TERM					
ENG	10XX	English Elective	3	0	3
ECO	151X	Economics Elective	3	0	3
EMT	7157	Electro-Mechanical Controls 2 (Servomechanisms)	3	3	4
EMT	7167	Robotics 1	2	2	3
CHE	2251	Freshman Chemistry 1	4	3	5
			15	8	18
TENTH TERM					
COMM	1020	Public Speaking	3	0	3
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8
					120

Economics Elective: ECO 1512, ECO 1513
Math Elective: Take one of the following series. (MAT 1191, MAT 1192, and MAT 1193) or (MAT 1154, MAT 1155, and MAT 1156)
Physics Elective: (PHY 2291 and PHY 2292) or (PHY 2295 and PHY 2296)
Technical Elective: PSET 7737, EET 7740

Electro-Mechanical Engineering Technology – Laser Major (EMETL)

The Electro-Mechanical Engineering Technology - Laser major prepares graduates to successfully enter and advance professionally in technical and mid-management positions in local and national industries that utilize lasers and electro-optics systems. Graduates of the program will work with laser material processing systems, and operate and troubleshoot optical systems including lasers, lens systems, and fiber optics. They will have ability to support industrial equipment in automated manufacturing and research environments. Graduates will also be prepared to continue in a bachelor's degree program in Electro-Mechanical Engineering or related fields.

ELECTRO-MECHANICAL ENGINEERING TECHNOLOGY LASER MAJOR

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	11XX	Math Elective 1	3	2	4
LOT	6710	Introduction to Lasers	2	3	3
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
EET	7728	Digital Combinational Logic	3	3	4
ET	9300	Technology Career Preparation	1	1	1
			14	12	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	11XX	Math Elective 2	3	2	4
PHY	22XX	Physics Elective 1	3	2	4
LOT	6720	Geometrical and Wave Optics	3	3	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
			14	10	18
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
CET	7935	Introduction to CAD (CET)	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			6	43	8
FIFTH TERM					
PHY	22XX	Physics Elective 2	3	2	4
LOT	6730	Optical Components and Devices	3	3	4
EET	7730	Electronics 1	5	3	6
EMT	7755	Motors, Motor Controls and Variable Drives	3	3	4
			14	11	18
SIXTH TERM					
MET	7125	Visual BASIC (MET)	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
LOT	6735	Industrial Laser Systems	3	3	4
MET	7132	Hydraulics & Pneumatics 1	2	3	3
EMT	7146	Electro-Mechanical Controls 1 (Programmable Controllers-PLCs)	3	3	4
MET	XXXX	Technical Elective	2	2	3
			13	11	17
EIGHTH TERM					
MAT	11XX	Math Elective 3	4	0	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			5	40	6
NINTH TERM					
ECO	151X	Economics Elective	3	0	3
PHY	22XX	Physics Elective 3	3	2	4
LOT	6740	Applications of Lasers	3	3	4
EMT	7167	Robotics 1	2	2	3
COMM	102X	Communications Elective	3	0	3
			14	7	17
TENTH TERM					
COMM	1020	Public Speaking	3	0	3
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8
					120

Communications Elective: COMM 1020, COMM 1024 Economics Elective: ECO 1512, ECO 1513 Math Elective: Take one of the following series. (MAT 1191, MAT 1192, and MAT 1193) or (MAT 1154, MAT 1155, and MAT 1156) Physics Elective: Take one of the following series. (PHY 2291, PHY 2292, PHY 2293) or (PHY 2295, PHY 2296, PHY 2297). Technical Elective: MET 7130, MET 7148, MET 7310. English Elective: ENG 1003, 1010

Electro-Mechanical Engineering Technology Renewable Energy and Energy Efficiency Major (EMTR)

Program Chair: Larry Feist
Co-op Coordinator: Kim Richards

The Electro-Mechanical Engineering Technology-Renewable Energy and Energy Efficiency major was developed to address the needs of growing industries in Ohio and middle America including photovoltaic electric panel manufacturers (formerly known as solar panels), wind turbine manufacturers, fuel cell manufacturers, photovoltaic and wind turbine installation and service, and energy efficiency companies/consultants. These new technologies require most of the traditional foundation courses of an Electro-Mechanical Engineering Technologies student but graduates of the program can choose possible pathways including: technician in a manufacturing facility, such as a wind turbine, photovoltaic, or fuel cell manufacturer; installer or field technician for wind turbine, photovoltaic, or fuel cell technology; or pursue a bachelor's degree in engineering technologies such as mechatronics or chemical engineering for research and development of the next generation of renewable energies. Graduates may also become energy efficiency technicians, engineers, or auditors to advise businesses or manufacturers how to reduce energy consumption.

Electro-Mechanical Engineering Technology Renewable Energy and Energy Efficiency Major

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	11XX	Math Elective 1	4	0	4
ECO	151X	Economics Elective 1	3	0	3
MET	7310	Manufacturing Processes with CNC Programming	2	3	3
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
			17	6	19
SECOND TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
EET	7728	Digital Combinational Logic	3	3	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	43	9
THIRD TERM					
MAT	11XX	Math Elective	4	0	4
PSC	2267	Energy	3	2	4

PHY	22XX	Physics Elective	3	2	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
PSET	7915	Electrical Safe Work Practices	0	2	1
			15	9	19
FOURTH TERM					
PHY	22XX	Physics Elective	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
COMM	20XX	Communication Elective	3	0	3
CET	7935	Introduction to CAD (CET)	2	3	3
MET	71XX	Mechanical Elective	2	3	3
EMT	7755	Motors, Motor Controls and Variable Drives	3	3	4
EMTR	7792	Energy Efficiency and Audits	2	3	3
			15	12	19
SIXTH TERM					
MET	7125	Visual BASIC (MET)	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
CHE	2251	Freshman Chemistry 1	4	3	5
MET	7141	Kinematics & Dynamics of Machines	3	2	4
EMT	7146	Electro-Mechanical Controls 1 (Programmable Controllers-PLCs)	3	3	4
EMTR	7794	Photovoltaic and Wind Devices	4	3	5
XXX	XXXX	Technical Elective	2	3	3
			16	14	21
EIGHTH TERM					
MAT	11XX	Math Elective 3	4	0	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			5	40	6
NINTH TERM					
ENG	10XX	English Elective	3	0	3
CULT	1648	Social Issues in Technology	3	0	3
EMTR	77XX	Renewable Energy Elective	2	3	3
XXX	XXXX	Science Elective	3	2	4
			11	5	13
TENTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			1	40	2
					119

Communication Elective: COMM 1020, COMM 1024
Economics Elective: ECO 1512, ECO 1513
English Elective: ENG 1010, ENG 1003*
Mathematics Elective: Take one of the following series, (MAT 1191, MAT 1192, MAT 1193) or (MAT 1154, MAT 1155, MAT 1156)*
Mechanical Elective: MET 7145, MET 7130*
Physics Elective: Take one of the following sequences, (PHY 2291, PHY 2292) or (PHY 2295, PHY 2296)*
Science Elective: PHY 2293, CHE 2252*
Technical Elective: EET 7730, PSET 7737
Renewable Energy Elective: EMTR 7793, EMTR 7795
*Students planning to transfer to a Bachelor of Science in an engineering program must take elective courses identified with an asterisk.

Electro-Mechanical Engineering Technology Renewable Energy and Energy Efficiency Certificate (EMTRC)

Advisor: Larry Feist

The Electro-Mechanical Engineering Technology Renewable Energy and Energy Efficiency certificate is designed for current electricians, technicians, or engineers who desire additional education in the field of renewable energies and energy efficiency. Most students can complete the certificate in about one year, depending on their previous education and work experience. All courses taken in the program receive college degree-seeking credit and apply towards the Electro-Mechanical Engineering Technology Renewable Energy and Energy Efficiency major.

Electro-Mechanical Engineering Technology Renewable Energy and Energy Efficiency Certificate

		Hours Per Week Class	Lab	Credit Hours
MAT 1171	Technical Mathematics 1	4	0	4
EMTR 7791	Electronic Devices for EMTRC	2	3	3
EMTR 7792	Energy Efficiency and Audits	2	3	3
EMTR 7794	Photovoltaic and Wind Devices	4	3	5
EMTR79XX	Renewable Energy Elective	2	3	3
		14	12	18
				18

Renewable Energy Elective: EMTR 7793, EMTR 7795

PC Support and Administration Technology (PCSA)

Program Chair: Steven J. Yelton, PE
Co-op Coordinator:
Advisor: Linda Pohlgeers

Students following the PC Support and Administration program develop the skills needed to install, configure, troubleshoot, and maintain hardware and software for all types of personal computers. Students learn computer repair, operating systems, networking technologies, and technical support center (helpdesk) management.

Graduates of the program earn an Associate of Applied Science degree. Job titles for PCSA graduates may include: senior PC support technician, PC system coordinator, or helpdesk manager.

PC Support and Administration Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1171	Technical Mathematics 1	4	0	4
IT	5201	Information Technology Concepts	2	3	3
IT	5231	Operating Systems: Windows 1	2	3	3
EET	7701	Electronic Fundamentals 1	3	3	4
ET	9300	Technology Career Preparation	1	1	1
			15	10	18
SECOND TERM					
EET	7779	Computer Repair: Basic	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1172	Technical Mathematics 2	4	0	4
IT	5131	Network Management/Help Desk	3	2	4
IT	5232	Operating Systems: Windows 2	2	3	3
EET	7707	Survey of Analog Devices	3	2	4
			15	7	18
FOURTH TERM					
EET	7780	Computer Repair: General Systems	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5

FIFTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
IT	5121	LAN Administration: Windows 1	3	2	4
IT	5151	Network Communications 1	2	3	3
EET	7705	Survey of Digital Systems	3	3	4
			11	8	14
SIXTH TERM					
EET	7781	Computer Repair: Advanced Systems	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
IT	5152	Network Communications 2	2	3	3
IT	5154	Network Security and Legal Issues 1	3	2	4
IT	5255	Internet Programming: HTML	2	3	3
EET	7716	Computer Calculations for Electronics	3	3	4
			13	11	17
EIGHTH TERM					
ECO	1512	Microeconomics	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
COMM	1020	Public Speaking	3	0	3
OT	3068	Database Management: Access 1	2	3	3
IT	5291	Visual BASIC 1	2	3	3
IT	5340	PCSA Design Project	2	3	3
			12	9	15
TENTH TERM					
IT	5332	Internet Programming: JavaScript	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
					107

Computer Repair Certificate (CPTR)

Advisor: Steven J. Yelton, PE

The Computer Repair certificate prepares students for employment as computer repair technicians. The certificate is a valuable add-on for students with associate's degrees in computer-related majors to increase understanding of computer hardware, electronics, wiring, and power distribution systems. The certificate may also be used as a first step toward an associate's degree and satisfies course requirements in the Network Administration Technology and the PC Support and Administration programs.

Computer Repair Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
MAT	1171	Technical Mathematics 1	4	0	4
MAT	1172	Technical Mathematics 2	4	0	4
IT	5231	Operating Systems: Windows 1	2	3	3
IT	5232	Operating Systems: Windows 2	2	3	3
EET	7701	Electronic Fundamentals 1	3	3	4
EET	7705	Survey of Digital Systems	3	3	4
EET	7707	Survey of Analog Devices	3	2	4
EET	7716	Computer Calculations for Electronics	3	3	4
EET	7779	Computer Repair: Basic	2	3	3
EET	7780	Computer Repair: General Systems	2	3	3
EET	7781	Computer Repair: Advanced Systems	2	3	3
			30	26	39
					39

Power Systems Engineering Technology (PSET)

Program Chairs: Larry Feist
Co-op Coordinator: Sue Dolan
Advisor: Larry Morris, PE

Power Systems Engineering Technology prepares students to meet the current and future personnel needs of utility companies, electrical contractors, HVAC contractors, and industrial electrical design and maintenance firms.

Graduates are prepared to troubleshoot and repair power systems equipment and instrumentation, calibrate instrumentation, work on computer controlled networks, work in technical sales, and use measuring and software tools to test/maintain equipment.

Graduates of the program earn an Associate of Applied Science degree. Job titles for PSET graduates include power systems technician, lineman, electrician, senior technician, and manager.

Power Systems Engineering Technology

All degree seeking students must complete an FYE course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	11XX	Math Elective 1	3	2	4
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
EET	7728	Digital Combinational Logic	3	3	4
PHY	22XX	Physics Elective 1	3	2	4
			14	10	18
SECOND TERM					
CET	7935	Introduction to CAD (CET)	2	3	3
PHY	22XX	Physics Elective 2	3	2	4
ENG	1001	English Composition 1	3	0	3
PSET	7718	Introduction to the National Electric Code (NEC)	1	3	2
PSET	7737	Introduction to Power Systems	2	3	3
			11	11	15
THIRD TERM					
PSET	7915	Electrical Safe Work Practices	0	2	1
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			1	42	3
FOURTH TERM					
MAT	11XX	Math Elective 2	3	2	4
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
PSET	7739	Intro to Stationary Engineering	3	2	4
PSET	7771	Wiring, Cables, and Connectors	2	3	3
			13	10	17
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
SIXTH TERM					
EET	7730	Electronics 1	5	3	6
PSET	7747	Power Systems Design 1	3	3	4
EMTR	7792	Energy Efficiency and Audits	2	3	3
EMT	7755	Motors, Motor Controls and Variable Drives	3	3	4
			13	12	17
SEVENTH TERM					
COMM	102X	Communications Elective	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
EIGHTH TERM					
EMTR	7794	Photovoltaic and Wind Devices	4	3	5
PSY	1505	Introduction to Psychology 1	3	0	3

ECO	15XX	Economics Elective	3	0	3
PSET	7757	Power Systems Design 2	4	3	5
MAT	11XX	Math Elective 3	4	0	4
			18	6	20
NINTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
TENTH TERM					
ENG	10XX	English Elective	3	0	3
CHE	2231	Fundamentals of General Chemistry	3	3	4
PSET	7717	Introduction to Smart Grid	2	3	3
PSET	7791	Instrumentation and Controls	2	3	3
			10	9	13
					118

Communications Elective: COMM 1020, COMM 1024
Economics Elective: ECO 1512, ECO 1513
English Elective: ENG 1003, ENG 1010
Math Electives: Take one of the following series: (MAT 1154, MAT 1155, MAT 1156) or (MAT 1191, MAT 1192, MAT 1193)
Physics Elective: Take one of the following series: (PHY 2291, PHY 2292) or (PHY 2295, PHY 2296)

Power Systems Engineering Technology Certificate

The Power Systems Engineering Technology certificate is designed for students who have a degree in an area other than power, or for those with significant experience in an electrical field who desire to enhance their knowledge in residential and commercial power systems. The certificate is ideally suited for individuals working in a power-related field with no formal background in power systems.

Power Systems Engineering Technology Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State. Students must have prior knowledge of basic electricity or complete course EET-7701, Electronic Fundamentals 1.

			Hours Per Week Class	Lab	Credit Hours
PSET	7718	Introduction to the National Electric Code (NEC)	1	3	2
PSET	7737	Introduction to Power Systems	2	3	3
PSET	7747	Power Systems Design 1	4	3	5
PSET	7771	Wiring, Cables, and Connectors	2	3	3
XXX	XXXX	Technical Elective	3	3	4
			12	15	17
					17

Technical Electives: CET 7935, CET 7936, CET 7968, EET 7728, EET 7748, EMT 7758, EMTR 7791, EMTR 7792, EMTR 7793, EMTR 7794, PSET 7739, PSET 7752, PSET 7757

Power Systems Engineering Technology - Smart Grid Major (PSETS)

Power systems technicians monitor and maintain the quality, availability, reliability, transferability, and safety of the power systems we rely on daily. The Power Systems Engineering Technology Smart Grid Major provides skills and competencies that will build on the foundation of power systems technicians. This major will educate and train the labor force needed for the new national smart grid. The Smart Grid Major will cover distributed power generation and smart transmission line system technology that integrates with local area networks.

Graduates are prepared to make use of a technical degree that is both broad-based and highly specialized

The department has articulation agreements in place with many four-year colleges and universities in the tri-state area and beyond. Many colleges and universities with baccalaureate and graduate degrees in Electrical Engineering and Engineering Technology offer power systems options and majors in their curricula.

Power Systems Engineering Technology Smart Grid Major

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
EET	7728	Digital Combinational Logic	3	3	4
MAT	11XX	Math Elective 1	3	2	4
PHY	22XX	Physics Elective 1	3	2	4
			14	10	18
SECOND TERM					
CET	7935	Introduction to CAD (CET)	2	3	3
ENG	1001	English Composition 1	3	0	3
PHY	22XX	Physics Elective 2	3	2	4
PSET	7718	Introduction to the National Electric Code (NEC)	1	3	2
PSET	7737	Introduction to Power Systems	2	3	3
			11	11	15
THIRD TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
PSET	7915	Electrical Safe Work Practices	0	2	1
			1	42	3
FOURTH TERM					
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
EET	7738	Digital Sequential Logic	3	3	4
MAT	11XX	Math Elective 2	3	2	4
PSET	7771	Wiring, Cables, and Connectors	2	3	3
			11	11	17
FIFTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
ENG	1002	English Composition 2	3	0	3
			4	40	5
SIXTH TERM					
EET	7748	Microprocessor Systems 1	3	3	4
EMTR	7792	Energy Efficiency and Audits	2	3	3
PSET	7717	Introduction to Smart Grid	2	3	3
PSET	7747	Power Systems Design 1	3	3	4
			10	12	14
SEVENTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
COMM	102X	Communications Elective	3	0	3
			4	40	5
EIGHTH TERM					
ECO	151X	Economics Elective	3	0	3
MAT	11XX	Math elective 3	4	0	4
PSET	7757	Power Systems Design 2	4	3	5
PSET	7768	Smart Grid 1: Distribution System	3	3	4
PSY	1505	Introduction to Psychology 1	3	0	3
			17	6	19
NINTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
CULT	1648	Social Issues in Technology	3	0	3
			4	40	5

TENTH TERM					
CHE	2231	Fundamentals of General Chemistry	3	3	4
ENG	10XX	English Elective	3	0	3
PSET	7769	Smart Grid 2: Transmission Systems	3	3	4
PSET	7770	Smart Grid Distributed Power Project	0	6	3
PSET	7791	Instrumentation and Controls	2	3	3
			11	15	17
					118

Communications Elective: COMM 1020, COMM 1024
Economics Elective: ECO 1512, ECO 1513
English Elective: ENG 1003, ENG 1010
Math Electives: Take one of the following series: (MAT 1191, MAT 1192, and MAT 1193) or (MAT 1154, MAT 1155, and MAT 1156)
Non-Technical Elective: EET 7730, PHY 2293
Physics Elective: (PHY 2291 and PHY 2292) or (PHY 2295 and PHY 2296)

Power Systems Engineering Technology - Smart Grid Certificate

The Power Systems Engineering Technology certificate is designed for students who have a degree in an area other than power, or for those with significant experience in an electrical field who desire to enhance their knowledge in residential and commercial power systems. The certificate is ideally suited for individuals working in a power-related field with no formal background in power systems.

Power Systems Engineering Technology Smart Grid Certificate

Program Chair approval is required for admission to this certificate. The Power Systems Engineering Technology (PSET) – Smart Grid Certificate curricula is an option for a student who already has an associate's or bachelor's degree in electrical, electronic, electro-mechanical, software, power systems engineering or engineering technology or approval by the PSET Program Chair. This certificate will cover distributed power generation and smart transmission line system technology that integrates with local area networks.

			Hours Per Week Class	Lab	Credit Hours
PSET	7717	Introduction to Smart Grid	2	3	3
PSET	7737	Introduction to Power Systems	2	3	3
PSET	7768	Smart Grid 1: Distribution System	3	3	4
PSET	7769	Smart Grid 2: Transmission System	0	6	3
PSET	7770	Smart Grid Distributed Power Project	0	6	3
			7	21	16
					16

Mechanical Engineering Technologies Department

The Mechanical Engineering Technologies Department offers degree programs in Mechanical Engineering Technology and Industrial Design Technology. The Mechanical Engineering Technology degree offers majors in Design or Manufacturing Management, and an option in Plastics. The department also offers a certificate in Manufacturing CNC for those currently employed in the manufacturing field who are seeking specialized training in CNC programming.

Mechanical Engineering Technology

Program Chair: Mike DeVore, PE
Co-op Coordinator: Kim Richards
Advisors: David Simmermon

Students in the Mechanical Engineering Technology program learn to use the latest technology to design and manufacture devices and systems for use in consumer products, machine tools, automotive, and aerospace industries. Graduates of the MET program are prepared to design mechanical systems, operate CAD systems, manage design projects, and perform product testing. Examples of program graduate job titles include product designer, CAD/CAM system specialist, product support manager, design engineering technician, or project engineering technician.

MET is a two-year Associate of Applied Science program that includes majors in MET-Design, MET-Manufacturing Management, and an MET-Plastics option. The Mechanical Engineering Technology program prepares graduates to successfully enter and pursue baccalaureate degrees and to enter and advance professionally through technical and mid-management positions in local industry.

The Mechanical Engineering Technology program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone (410) 347-7700. Many MET graduates continue their education after earning an associate's degree from Cincinnati State. Articulation agreements simplify credit transfer to local colleges.

Mechanical Engineering Technology - Design (MET)

MET-Design is the traditional Mechanical Engineering Technology program, which prepares graduates to design, develop, and test consumer products, industrial machinery, and automated manufacturing systems. The curriculum prepares students for solving real-world problems using logical thinking, problem solving, and computer software. Courses emphasize computer-aided design (CAD) and computer-aided engineering (CAE) as students learn to produce designs from concept to completion. The METD curriculum provides students with the most effective mechanism to transfer into an MET bachelor's degree program.

Mechanical Engineering Technology - Design

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
MET	7108	Engineering Drawing 1 with AutoCAD	2	3	3
MET	7310	Manufacturing Processes with CNC Programming	2	3	3
ET	9300	Technology Career Preparation	1	1	1
			14	11	18
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	3	2	4
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
MET	7120	Mechanical Engineering Technology CAD 2	2	3	3
MET	7121	Engineering Drawing 2 with AutoCAD	2	3	3
MET	7130	Engineering Mechanics-Statics	3	2	4
			13	12	18
FOURTH TERM					
MET	7125	Visual BASIC (MET)	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
FIFTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
MET	7122	Mechanical Engineering Technology CAD 3	2	3	3

MET	7132	Hydraulics & Pneumatics 1	2	3	3
MET	7140	Strength of Materials	3	3	4
MET	7141	Kinematics & Dynamics of Machines	3	2	4
			14	11	18
SIXTH TERM					
CHE	2231	Fundamentals of General Chemistry	3	3	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	43	6
SEVENTH TERM					
ENG	1003	English Composition 3	3	0	3
COMM	1020	Public Speaking	3	0	3
MET	7111	Engineering Materials	3	2	4
MET	7150	Machine Design 1	3	3	4
MET	7152	Hydraulics & Pneumatics 2	2	3	3
MET	7198	MET Design Project 1	2	6	5
			16	14	22
EIGHTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ECO	1512	Microeconomics	3	0	3
MET	7148	Applied Thermodynamics	3	2	4
MET	7155	Machine Design 2	3	3	4
MET	7158	MET Design Project 2	2	3	3
EET	7706	Electrical Fundamentals for MET	2	3	3
			13	11	17
TENTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
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Mechanical Engineering Technology - Manufacturing Management (METM)

The MET-Manufacturing Management major prepares graduates to function effectively as technicians in production and quality control in automated manufacturing environments. The curriculum contains hands-on manufacturing processes and state-of-the-art computer-aided drafting (CAD) and computer-aided machining (CAM) integrated with statistical process control (SPC) and other critical technologies.

Mechanical Engineering Technology - Manufacturing Management Major

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
MET	7108	Engineering Drawing 1 with AutoCAD	2	3	3
MET	7310	Manufacturing Processes with CNC Programming	2	3	3
ET	9300	Technology Career Preparation	1	1	1
			14	11	18
SECOND TERM					
CHE	2231	Fundamentals of General Chemistry	3	3	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	43	6
THIRD TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
MET	7120	Mechanical Engineering Technology CAD 2	2	3	3
MET	7121	Engineering Drawing 2 with AutoCAD	2	3	3
MET	7220	Plastic Materials and Processes 1	2	3	3
MET	7320	Advanced CNC Programming	2	3	3
			11	14	16
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1192	Algebra and Trigonometry 2	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	42	9
FIFTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
MET	7122	Mechanical Engineering Technology CAD 3	2	3	3
MET	7132	Hydraulics & Pneumatics 1	2	3	3
MET	7145	Statics and Strength of Materials	2	3	3
MET	7230	Plastic Materials and Processes 2	2	3	3
			12	12	16
SIXTH TERM					
MET	7125	Visual BASIC (MET)	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
MET	7111	Engineering Materials	3	2	4
MET	7152	Hydraulics & Pneumatics 2	2	3	3
MET	7198	MET Design Project 1	2	6	5
MET	7330	CAD-CAM 1	2	3	3
MET	7355	Quality Control with SPC	2	3	3
			11	17	18
EIGHTH TERM					
COMM	1020	Public Speaking	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8
NINTH TERM					
ENG	1003	English Composition 3	3	0	3
ECO	1512	Microeconomics	3	0	3
MET	7158	MET Design Project 2	2	3	3
MET	7340	CAD-CAM 2	2	3	3
MET	7360	Manufacturing Quality Processes: Six Sigma	2	3	3
EET	7706	Electrical Fundamentals for MET	2	3	3
			14	12	18
TENTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
					119

Mechanical Engineering Technology - Plastics Option (METP)

The MET-Plastics option prepares graduates to function effectively as technicians in the plastics materials and processing industry. In the MET-Plastics program, students receive specialized training in the areas of thermoplastic, thermoset, and composite materials; blow molds and injection molds; and plastics joining and assembly techniques.

Mechanical Engineering Technology - Plastics Option

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
MET	7108	Engineering Drawing 1 with AutoCAD	2	3	3
MET	7310	Manufacturing Processes with CNC Programming	2	3	3
ET	9300	Technology Career Preparation	1	1	1
			14	11	18
SECOND TERM					
CHE	2231	Fundamentals of General Chemistry	3	3	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	43	6
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	3	2	4
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
MET	7120	Mechanical Engineering Technology CAD 2	2	3	3
MET	7121	Engineering Drawing 2 with AutoCAD	2	3	3
MET	7130	Engineering Mechanics-Statics	3	2	4
MET	7220	Plastic Materials and Processes 1	2	3	3
			15	15	21
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
FIFTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
MET	7122	Mechanical Engineering Technology CAD 3	2	3	3
MET	7132	Hydraulics & Pneumatics 1	2	3	3
MET	7140	Strength of Materials	3	3	4
MET	7230	Plastic Materials and Processes 2	2	3	3
			13	12	17
SIXTH TERM					
MET	7125	Visual BASIC (MET)	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
ENG	1003	English Composition 3	3	0	3
MET	7111	Engineering Materials	3	2	4
MET	7150	Machine Design 1	3	3	4
MET	7152	Hydraulics & Pneumatics 2	2	3	3
MET	7355	Quality Control with SPC	2	3	3
			13	11	17
EIGHTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
COMM	1020	Public Speaking	3	0	3
ECO	1512	Microeconomics	3	0	3
MET	7155	Machine Design 2	3	3	4
MET	7240	Plastic Materials and Processes 3	3	2	4
EET	7706	Electrical Fundamentals for MET	2	3	3
			14	8	17
TENTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
					116

Mechanical Engineering Technology - Manufacturing CNC Certificate (METMC)

This certificate is designed for those currently employed in the manufacturing field who desire additional education in the specialized field of CNC programming and computer-aided manufacturing. Most students are able to complete the certificate course requirements in one year or less. All courses required for the CNC certificate may be applied directly toward the two-year Associate of Applied Science degree in the Mechanical Engineering Technology-Manufacturing Management major.

Mechanical Engineering Technology - Manufacturing CNC Certificate

			Hours Per Week Class	Lab	Credit Hours
MAT	1191	Algebra and Trigonometry 1	3	2	4
MET	7108	Engineering Drawing 1 with AutoCAD	2	3	3
MET	7310	Manufacturing Processes with CNC Programming	2	3	3
MET	7320	Advanced CNC Programming	2	3	3
MET	7330	CAD-CAM 1	2	3	3
			11	14	16
					16

Industrial Design Technology (IDT)

Program Chair: Josh Haldeman, IDSA
Co-op Coordinator: Kathleen McClusky

The Industrial Design Technology (IDT) program combines the analytical and technical computer skills from a mechanical program with the visual and artistic skills from a computer graphics program. The IDT program deals with the form and function of manufactured goods. An industrial design technician is involved in the creation of new product shapes and styles, or re-designing existing products to increase their usefulness through applications of ergonomics, computer generated images, modeling, and prototyping. The IDT program at Cincinnati State includes four cooperative education terms with local placement and the potential for national placement. Upon graduation, students earn an Associate of Applied Science degree.

IDT program graduates may be involved in product designs such as tools, toys, electronic equipment, appliances, furniture, medical equipment, and transportation equipment. An industrial design technician is a specialist supporting industrial design and interfacing with engineering and manufacturing to create new products.

Industrial Design Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
ART	1690	Drawing 1	2	2	3
IT	5400	Design 1	2	3	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
IDT	7801	Introduction to Industrial Design	2	3	3
IDT	7805	Rapid Visualization Techniques	0	4	2
			11	14	17

SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MAT	1171	Technical Mathematics 1	4	0	4
IT	5420	Digital Media Concepts	2	3	3
MET	7108	Engineering Drawing 1 with AutoCAD	2	3	3
MET	7310	Manufacturing Processes with CNC Programming	2	3	3
IDT	7825	Human Factors in Design	2	3	3
			15	12	19
THIRD TERM					
PHY	2222	Technical Physics 2	2	3	3
IT	5441	Beginning 2D Graphics: Bitmap	2	3	3
MET	7120	Mechanical Engineering Technology AutoCAD 2	2	3	3
MET	7220	Plastic Materials and Processes 1	2	3	3
MET	7320	Advanced CNC Programming	2	3	3
IDT	7850	Computer Modeling 1	2	3	3
			12	18	18
FOURTH TERM					
MAT	1172	Technical Mathematics 2	4	0	4
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			5	40	6
FIFTH TERM					
ART	1694	Sculpture 1	2	3	4
MET	7121	Engineering Drawing 2 with AutoCAD	2	3	3
MET	7145	Statics and Strength of Materials	2	3	3
IDT	7855	Computer Modeling 2	2	3	3
			8	12	13
SIXTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			1	40	2
SEVENTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
MET	7111	Engineering Materials	3	2	4
MET	7122	Mechanical Engineering Technology CAD 3	2	3	3
MET	7330	CAD-CAM 1	2	3	3
IDT	7870	Model Making/Prototyping	2	3	3
			12	11	16
EIGHTH TERM					
IDT	7880	Advanced Model Making/Prototyping	2	3	3
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			3	43	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
COMM	1024	Group Dynamics & Problem Solving	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
IDT	7890	Industrial Design Project	2	3	3
			11	3	12
TENTH TERM					
ET	9400	Cooperative Education - Engineering Technologies (Alternating)	1	40	2
			1	40	2
					110

Multimedia Information Design Department

The Multimedia Information Design Department offers degree programs in Audio/Video Production, Graphic Design, and Multimedia & Web Design. The department also offers three certificate programs: Design, Technical and Professional Communication, and Web Design.

Audio/Video Production (AVP)

Program Chair: Dave Killen
Co-op Coordinator: Andi Feld

Students pursuing the Audio/Video Production program prepare for careers in video production, video post-production, and sound design for radio, television, film, web, or other interactive media. Students learn to operate and maintain digital audio and video equipment, and learn to use industry-standard software applications in Cincinnati State's world-class professional studio facilities.

Currently a significant number of the courses required for the Audio/Video Production degree are scheduled between 8 a.m. and 6 p.m., Monday through Friday. Some of the required courses also are available in the evening or on weekends. Students should consult frequently with their advisor for current schedule information.

Graduates earn an Associate of Applied Science degree. Job titles for graduates include: video editor, sound designer, videographer, audio/video specialist, compositing artist, motion graphics designer, or production assistant.

Audio/Video Production

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1151	Intermediate Algebra	3	2	4
IT	5400	Design Principles for Multimedia	2	3	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
IT	5420	Digital Media Concepts	2	3	3
			12	10	16
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MKT	2910	Marketing Research for Multimedia Professionals	3	0	3
IT	5441	Beginning 2D Graphics: Bitmap	2	3	3
IT	5453	Web Development 1	2	3	3
IT	5522	Audio 1: Principles of Audio Recording	3	0	3
			13	6	15
THIRD TERM					
ENG	1003	English Composition 3	3	0	3
TC	5006	Writing Short Scripts - Audio and Video	2	0	2
IT	5220	Videography, Gripping, and Lighting Techniques	2	3	3
IT	5443	Beginning 2D Graphics: Vector	2	3	3
IT	5523	Audio 2: Editing and Mixing	2	3	3
BT	9200	Professional Practices	1	0	1
			12	9	15
FOURTH TERM					
COMM	1044	Introduction to Film Studies, 1890s-1950s	2	3	3
TC	5036	Scriptwriting for Audio and Video: Long Form	2	3	3
IT	5221	Video Production and Editing Basics	2	3	3
IT	5530	Introduction to Broadcast Television Production	2	3	3
			8	12	12
FIFTH TERM					
COMM	102X	Communication Elective 1	3	0	3
ART	1685	Introduction to Photography	2	3	3
IT	5445	Multimedia Design 1	2	3	3
IT	5524	Audio 3: Production and Sound Design	3	4	5
			10	10	14

SIXTH TERM					
IT	5224	Video Production/Editing: Avid	3	4	5
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	44	7
SEVENTH TERM					
IT	5225	Video Post-Production: After Effects	3	4	5
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	44	7
EIGHTH TERM					
COMM	10XX	Communication Elective 2	3	0	3
IT	5227	Video Production/Editing: Final Cut Pro	3	4	5
XXX	XXXX	AVP Elective	2	3	3
			8	7	11
NINTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
XXX	XXXX	AVP Elective	2	3	3
			3	43	5
TENTH TERM					
IT	5228	Audio/Video Capstone Project	4	6	6
IT	5560	AVP Portfolio Production	1	2	2
			5	8	8
					110

Competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Communication Elective 1: COMM 1020, COMM 1024
Communication Elective 2: COMM 1040, COMM 1045, COMM 1050
AVP Elective: IT 5451, IT 5452, IT 5525, IT 5526, IT 5531, IT 5532, IT 5543, IT 5545, MUS 1669, TC 5020
Consult with program chair prior to registering for electives.

Graphic Design (GRD)

Program Chair: Jason Caudill
Co-op Coordinator: Andi Feld

The Graphic Design program prepares students for employment opportunities that require aptitude in two-dimensional and three-dimensional art and design, both traditional and computer-based. Students gain skill in digital creation of original art; two-dimensional illustration and animation; three-dimensional modeling and animation; web design; and basic video and post-processing.

Currently a significant number of the courses required for the Graphic Design program are scheduled between 8 a.m. and 6 p.m., Monday through Friday. Some of the required courses also are available in the evening or on weekends. Students should consult frequently with their advisor for current schedule information.

Graduates earn an Associate of Applied Science degree. Job titles for graduates include: graphic designer, 3-D artist, production artist, or web graphics/interface designer.

Graphic Design

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1151	Intermediate Algebra	3	2	4
IT	5400	Design Principles for Multimedia	2	3	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
IT	5420	Digital Media Concepts	2	3	3
			12	10	16
SECOND TERM					
IT	5405	Design Drawing for Multimedia 1	2	3	3
IT	5441	Beginning 2D Graphics: Bitmap	2	3	3
IT	5443	Beginning 2D Graphics: Vector	2	3	3
IT	5453	Web Development 1	2	3	3
BT	9200	Professional Practices	1	0	1
			9	12	13
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
COMM	1020	Public Speaking	3	0	3
GC	1423	Adobe InDesign	2	3	3
MKT	2910	Marketing Research for Multimedia Professionals	3	0	3
IT	5540	Digital Studio 1	2	3	3
			13	6	15
FOURTH TERM					
ENG	1003	English Composition 3	3	0	3
COMM	1040	Mass Media and Culture	3	0	3
TC	5005	Design Literacy	2	0	2
IT	5445	Multimedia Design 1	2	3	3
IT	5449	Graphic Design Portfolio Review	1	1	1
IT	5546	Audio/Video for Multimedia Applications	2	3	3
			13	7	15
FIFTH TERM					
TC	50XX	Technical Communication Elective	2	2	3
IT	5225	Video Post-Production: After Effects	3	4	5
IT	5444	Advanced 2D Graphics	2	3	3
IT	5451	Beginning 3D Visualization	3	4	5
			10	13	16
SIXTH TERM					
GC	1410	Graphic Design Production	2	3	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			3	43	5
SEVENTH TERM					
ART	16XX	Art Elective	2	2	3
IT	5452	3D Animation and Effects	3	4	5
IT	5541	Digital Studio 2	2	3	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			10	9	14
EIGHTH TERM					
IT	5570	GRD/MWEB Portfolio Production	1	2	2
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			2	42	4
NINTH TERM					
IT	5571	Graphic Design Capstone Project	4	6	6
XXX	XXXX	Advanced MID Elective	2	3	3
			6	9	9
TENTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			1	40	2
					109

Computer competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Art Elective: ART 1685, ART 1694, IT 5406, IT 5408
Humanities/Social Science Elective: Any PSY, SOC, ECO, HST, GEO, LBR, POL
Technical Communication Elective: TC 5020, TC 5033, TC 5035, TC 5036, TC 5045
Advanced MID Elective: IT 5224, IT 5226, IT 5227, IT 5460, IT 5522, IT 5543, IT 5545, IT 5599, GC 1429, CIT 9405
Consult with program chair prior to registering for electives.
Students must pass IT 5549 to be eligible for co-op.

Multimedia and Web Design (MWEB)

Program Chair: David Hoctor
Co-op Coordinator: Andi Feld

The Multimedia and Web Design degree program prepares students to design and deliver interactive content for Web, CD, DVD, and kiosk deployment. Students gain knowledge of diverse computer software, hardware, and standard programming languages used to design and integrate text, images, animation, video, and other content into effective Web and interactive multimedia products.

Currently a significant number of courses required for the degree are scheduled between 8 a.m. and 6 p.m., Monday through Friday. Some of the required courses also are offered in the evening or on weekends. Students should consult frequently with their advisor for current schedule information.

Graduates of the program earn an Associate of Applied Science degree. Job titles for graduates may include: Web designer, Web applications developer, multimedia designer/animator, multimedia designer, multimedia developer, Web/multimedia projects manager, user interface designer, Web/multimedia graphics designer, eBusiness developer, or interactive multimedia designer.

Multimedia and Web Design

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1151	Intermediate Algebra	3	2	4
IT	5400	Design Principles for Multimedia	2	3	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
IT	5420	Digital Media Concepts	2	3	3
			12	10	16
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
IT	5405	Design Drawing for Multimedia 1	2	3	3
IT	5441	Beginning 2D Graphics: Bitmap	2	3	3
IT	5443	Beginning 2D Graphics: Vector	2	3	3
IT	5453	Web Development 1	2	3	3
BT	9200	Professional Practices	1	0	1
			12	12	16
THIRD TERM					
ENG	1010	Technical Writing 1	3	0	3
TC	5020	Usability Assessment 1	3	2	4
IT	5435	Web Design 1	2	3	3
IT	5447	Beginning 2D Graphics: Web	2	3	3
IT	5454	Web Development 2	2	3	3
			12	11	16
FOURTH TERM					
MKT	2910	Marketing Research for Multimedia Professionals	3	0	3
TC	5045	Writing for the Web	2	3	3
IT	5332	Internet Programming: JavaScript	2	3	3
IT	5445	Multimedia Design 1	2	3	3
IT	5448	Multimedia & Web Design Portfolio Review	1	1	1
IT	5540	Digital Studio 1	2	3	3
			12	13	16
FIFTH TERM					
COMM	1020	Public Speaking	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
SIXTH TERM					
COMM	1040	Mass Media and Culture	3	0	3
IT	5320	Database Design and SQL	2	3	3
IT	5446	Multimedia Design 2	2	3	3
IT	5546	Audio/Video for Multimedia Applications	2	3	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			12	9	15
SEVENTH TERM					
IT	5570	GRD/MWEB Portfolio Production	1	2	2
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			2	42	4
EIGHTH TERM					
XXX	XXXX	Humanities/Social Science Elective	3	0	3
XXX	XXXX	Multimedia/Web Elective 1	2	3	3
XXX	XXXX	Multimedia/Web Elective 2	2	3	3
			7	6	9
NINTH TERM					
IT	5457	Multimedia & Web Design Capstone Project	4	6	6
XXX	XXXX	Multimedia/Web Elective 3	2	3	3
			6	9	9
TENTH TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			1	40	2
					108

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Humanities/Social Science Elective: Any PSY, SOC, ECO, HST, GEO, LBR, POL
Multimedia/Web Electives: IT 5220, IT 5221, IT 5225, IT 5291, IT 5321, IT 5322, IT 5331, IT 5333, IT 5334, IT 5432, IT 5436, IT 5444, IT 5455, IT 5522, IT 5541, IT 5545, TC 5033, TC 5035, TC 5005 or TC 5006 (must be combined with ENG 1003). Consult with program chair prior to registering for electives.

Design Certificate

Advisor: Jason Caudill

The Design Certificate provides students who already hold a bachelor's degree in art, design, writing, marketing, advertising, or related fields the opportunity to gain advanced skills in design, software applications, and problem-solving, as evidenced through completion of a portfolio. This portfolio demonstrates the student's readiness for employment in advertising, marketing, graphic design, and related fields through skills including:

- Comprehensive design knowledge
- Creative thinking techniques
- Typographical principles
- Color and composition theory
- Packaging guidelines and practices
- Interactive multimedia design applications and usability assessment

Student portfolio projects also demonstrate:

- Concept-to-completion of many related pieces
- Evidence of mastery of brand identity, both in creating new brands and deploying existing brand standards
- Innovative thought, creative ideas, and viable answers to challenging problems

Design Certificate

Entrance Requirements: Bachelor's degree in advertising, marketing, art, design, copywriting, or related field. Samples of work demonstrating personal style, creativity, and consideration of design elements. (Not limited to visual art/design.) Personal interview with program faculty. Successful completion of foundation courses IT 5400, IT 5441, IT 5443, MKT 2910, TC 5005, or equivalent courses at another institution.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
GC	1423	Adobe InDesign	2	3	3
IT	5405	Design Drawing for Multimedia 1	2	3	3
IT	5453	Web Development 1	2	3	3
DES	6001	Orientation to the Portfolio Process	1	1	1
			7	10	10

SECOND TERM					
IT	5406	Design Drawing for Multimedia 2	2	3	3
IT	5408	Character Design for Multimedia	2	3	3
IT	5435	Web Design 1	2	3	3
IT	5540	Digital Studio 1	2	3	3
DES	6002	Personal Brand Development 1	1	1	1
			9	13	13
THIRD TERM					
GC	1410	Graphic Design Production	2	3	3
TC	5020	Usability Assessment 1	3	2	4
IT	5444	Advanced 2D Graphics	2	3	3
IT	5541	Digital Studio 2	2	3	3
DES	6003	Personal Brand Development 2	1	1	1
			10	12	14
FOURTH TERM					
THE	1676	Improvisational Acting	3	0	3
IT	5445	Multimedia Design 1	2	3	3
IT	5460	Packaging Design	2	3	3
DES	6004	Design Competition	1	1	1
CIT	9405	CIT - Service Learning	1	20	1
			9	27	11
FIFTH TERM					
DES	6005	Personal Promotional Portfolio	1	1	1
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			2	41	3
					51

Technical and Professional Communication Certificate (TCC)

Advisor: Pam Ecker

The Technical and Professional Communication certificate provides opportunities to develop and expand communication skills and prepare for work in fields such as technical writing and editing, multimedia content writing and editing, and business or marketing communication. Students who complete this certificate gain experience planning, designing, and developing informational and promotional products that may be distributed through traditional print media or through multimedia channels including websites, CDs and DVDs, online help systems, or other "new media."

The certificate will assist individuals with prior education or experience in a technical or specialized field who want to expand their communication skills, and is also appropriate for students seeking associate's degrees who expect to continue their education in fields such as journalism, communications, or marketing communication.

Technical and Professional Communication Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MKT	2910	Marketing Research for Multimedia Professionals	3	0	3
IT	5400	Design Principles for Multimedia	2	3	3
IT	5453	Web Development 1	2	3	3
			10	6	12
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
TC	5020	Usability Assessment 1	3	2	4
XXX	XXXX	Software Applications Elective 1	2	3	3
			8	5	10
THIRD TERM					
ENG	10XX	English Composition Elective	3	0	3
TC	5045	Writing for the Web	2	3	3
XXX	XXXX	Software Applications Elective 2	2	3	3
			7	6	9
FOURTH TERM					
TC	5041	Technical Editing Methods 1	2	2	3
XXX	XXXX	Technical & Professional Communication Elective 1	2	3	3
XXX	XXXX	Software Applications Elective 3	2	3	3
			6	8	9
FIFTH TERM					
TC	50XX	Technical & Professional Communication Elective 2	2	3	3
TC	50XX	Technical & Professional Communication Elective 3	2	3	3
XXX	XXXX	Technical & Professional Communication Elective 4	2	3	3
			6	9	9
					49

Computer skills competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use word processing software

Students lacking knowledge of current computer applications may be required to complete IT 5410 and IT 5420.

English Composition Elective: ENG 1003, ENG 1010

Software Applications Electives: IT 5441, IT 5443, IT 5445, IT 5456, GC 1423, OT 3064, OT 3092. Program advisor consent required before registering for electives.

Technical & Professional Communication Electives: TC 5005 or TC 5006 (one only), TC 5021, TC 5032, TC 5033, TC 5034, TC 5035, TC 5036, TC 5042, COMM 1031, COMM 1032, MKT 1873, MKT 1878, MKT 2902, MKT 2997. Program advisor consent required before registering for electives.

Multimedia and Web Design

See Multimedia and Web Design for associate's degree.

Web Design Certificate (WEBC)

Advisor: David Hoctor

The Web Design certificate program is intended for individuals currently enrolled in an information technology degree program or currently working in an IT-related field who are seeking to upgrade their skills in the area of multimedia development. The certification is ideal for Web authors, marketing and communication professionals, PR professionals, graphic designers, desktop publishers, technical writers, and library scientists.

Upon completion of the program students are prepared to take the Certified Internet Webmaster Foundations exam. Individuals who successfully pass the CIW Foundations exam earn the title of CIW Associate.

Web Design Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
IT	5400	Design Principles for Multimedia	2	3	3
IT	5410	Cross-Platform Computer Systems and Applications	2	2	3
IT	5420	Digital Media Concepts	2	3	3
			9	8	12
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
MKT	1878	Internet Advertising	2	2	3
IT	5441	Beginning 2D Graphics: Bitmap	2	3	3
IT	5453	Web Development 1	2	3	3
			9	8	12
THIRD TERM					
IT	5435	Web Design 1	2	3	3
IT	5443	Beginning 2D Graphics: Vector	2	3	3
IT	5447	Beginning 2D Graphics: Web	2	3	3
IT	5454	Web Development 2	2	3	3
			8	12	12

FOURTH TERM					
TC	5020	Usability Assessment 1	3	2	4
TC	5045	Writing for the Web	2	3	3
IT	5445	Multimedia Design 1	2	3	3
IT	5455	Web Development 3	2	3	3
			9	11	13
FIFTH TERM					
MKT	1873	E-Commerce Business Strategy	2	2	3
IT	5570	Multimedia Portfolio Production	1	2	2
XXX	XXXX	Multimedia/Web Elective	2	3	3
			5	7	8
					57

Computer competencies required for program admittance:
- Keyboarding skill of minimum 20 wpm
- Ability to use application software

Multimedia/Web Elective: IT 5221, IT 5271, IT 5321, IT 5322, IT 5331, IT 5332, IT 5333, IT 5432, IT 5436, IT 5444, IT 5522, IT 5540, IT 5545, TC 5033, TC 5035

Network Systems Department

The Network Systems Department offers degree programs in Computer Network Engineering Technology and Network Administration Technology.

Computer Network Engineering Technology (CNET)

Program Chair: Paul Weingartner
Co-op Coordinator: Kathy McClusky

The Computer Network Engineering Technology degree program prepares graduates to enter and advance professionally through technical and mid-management positions in local industry; to successfully enter and pursue baccalaureate degrees; and to effectively design, troubleshoot, implement, maintain, and service computer networks. Emphasis is on network security (firewalls and intrusion prevention) and voice-over IP.

Graduates earn an Associate of Applied Science degree. Job titles for CNET graduates may include: network technician, electronics technician, network consultant, hardware engineering technician, technical support specialist, QA technician, software technician, or field service technician.

The Computer Network Engineering Technology program is accredited by Technology Accreditation Commission of the Accreditation Board for Engineering and Technology, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012, phone (410) 347-7700.

Computer Network Engineering Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1191	Algebra and Trigonometry 1	3	2	4
IT	5201	Information Technology Concepts	2	3	3
EET	7710	DC Circuit Analysis	5	0	5
EET	7711	DC Circuits Lab	0	3	1
EET	7728	Digital Combinational Logic	3	3	4
ET	9300	Technology Career Preparation	1	1	1
			14	12	18
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			7	40	8
THIRD TERM					
MAT	1192	Algebra and Trigonometry 2	3	2	4
IT	5151	Network Communications 1	2	3	3
EET	7720	AC Circuit Analysis	5	0	5
EET	7721	AC Circuits Lab	0	3	1
EET	7738	Digital Sequential Logic	3	3	4
			13	11	17
FOURTH TERM					
PHY	2291	Physics 1 (Algebra and Trigonometry Based)	3	2	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	42	6
FIFTH TERM					
PHY	2292	Physics 2 (Algebra and Trigonometry Based)	3	2	4
IT	5121	LAN Administration: Windows 1	3	2	4
IT	5152	Network Communications 2	2	3	3
EET	7730	Electronics 1	5	3	6
EET	7748	Microprocessor Systems 1	3	3	4
			16	13	21
SIXTH TERM					
MAT	1193	Analytic Geometry & Calculus 1	4	0	4
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			5	40	6
SEVENTH TERM					
ENG	1002	English Composition 2	3	0	3
COMM	102X	Communication Elective	3	0	3
IT	5122	LAN Administration: Windows 2	3	2	4
IT	5153	Network Communications 3	2	3	3
			11	5	13
EIGHTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
ENG	1010	Technical Writing 1	3	0	3
PHY	2293	Physics 3 (Algebra and Trigonometry Based)	3	2	4
IT	5129	Computer Network Systems Design Project	3	2	4
IT	5158	Network Security Design	2	2	3
IT	5299	Current Topics in Computer Network Engineering Technology	3	3	4
			14	9	18
TENTH TERM					
ECO	15XX	Economics Elective	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
					117

Communication Elective:COMM 1020, COMM 1024
Economics Elective: ECO 1512, ECO 1513

Network Administration Technology (NETAD)

Program Chair: Jeff Vetter
Co-op Coordinator: Kathy McClusky

The Network Administration Technology associate's degree program prepares graduates for careers in network systems analysis, planning, implementation, and administration. Students gain the necessary software skills to analyze network system needs and to install, operate, troubleshoot, and maintain local and wide area networks. Students obtain knowledge in basic network classifications and topologies, network wiring, server setup and configuration, network operating systems, communication standards for networks, network security, and network applications.

Graduates earn an Associate of Applied Business degree. Job titles for graduates include: network administrator, network specialist, network security administrator, network operations analyst, communication analyst, network technician, or customer service coordinator.

Network Administration Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1152	Pre-Calculus 1	5	0	5
IT	5201	Information Technology Concepts	2	3	3
IT	5231	Operating Systems: Windows 1	2	3	3
EET	7701	Electronic Fundamentals 1	3	3	4
ET	9300	Technology Career Preparation	1	1	1
			16	10	19
SECOND TERM					
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			1	40	2
THIRD TERM					
MAT	1128	Business Calculus	5	0	5
ECO	15XX	Economics Elective	3	0	3
IT	5131	Network Management/Help Desk	3	2	4
IT	5232	Operating Systems: Windows 2	2	3	3
IT	5320	Database Design and SQL	2	3	3
			15	8	18
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
FIFTH TERM					
LAW	1823	Business Law 1	3	0	3
MGT	2967	Introduction to Management	3	0	3
IT	5121	LAN Administration: Windows 1	3	2	4
IT	5151	Network Communications 1	2	3	3
IT	5291	Visual BASIC 1	2	3	3
			13	8	16
SIXTH TERM					
ENG	10XX	English Elective	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
SEVENTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
MKT	2901	Principles of Marketing 1	3	0	3
IT	5122	LAN Administration: Windows 2	3	2	4
IT	5154	Network Security and Legal Issues 1	3	2	4
IT	5XXX	Technical Elective	2	3	3
			14	7	17
EIGHTH TERM					
COMM	10XX	Communications Elective	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
NINTH TERM					
MGT	2989	Customer Service Systems	3	0	3
IT	5125	LAN Administration: Messaging	3	2	4
IT	5128	Networking Design Project	3	2	4
IT	5155	Network Security and Legal Issues 2	3	2	4
ACC	XXXX	Accounting Elective	3	0	3
			15	6	18
TENTH TERM					
CULT	1648	Social Issues in Technology	3	0	3
CIT	9400	Cooperative Education - Center for Innovative Technologies (Alternating)	1	40	2
			4	40	5
					110

Technical Elective: IT 5152, IT 5207, IT 5453
Economics Elective: ECO 1512, ECO 1513
English Elective: ENG 1003, ENG 1010, ENG 1011
Accounting Elective: ACC 2924, ACC 2926

Aviation Maintenance Technologies Department

Program Chair: James Schmid
Co-op Coordinator: Sue Dolan

The Aviation Maintenance Technologies Department offers an FAA-approved degree program in Aviation Maintenance Technology, and three certificate programs. The Avionics certificate provides advanced skills for students who are FAA-certified aviation mechanics. The Aviation Maintenance Airframe certificate and Aviation Maintenance Powerplant certificate prepare students to take FAA licensing tests.

All technical courses are conducted at the Cincinnati West Airport campus in Harrison, Ohio. Some non-technical courses are offered at Cincinnati West, or may be taken on the main campus.

Aviation Maintenance Technology (AMT)

The Aviation Maintenance Technology associate's degree program prepares students to perform inspections and repairs on all types of aircraft, approving them for flight after maintenance has been performed. Classroom study involves learning every system of the aircraft and developing mechanical skills on the fleet of aircraft that Cincinnati State owns. In addition, students have opportunities to co-op with a variety of aircraft operators ranging from general aviation to jet airliners.

The FAA has approved this program under Part 147 of the Federal Aviation Regulations (Air Agency Certificate Number AD9T00R). Graduates earn an Associate of Applied Science degree and are eligible to test for the FAA Aviation Mechanic certificate with Airframe and Powerplant ratings. Certification requirements are subject to current Federal Aviation Requirements and may change without notice.

Aviation Maintenance Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1171	Technical Mathematics 1	4	0	4
PHY	2221	Technical Physics 1	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
			15	12	18
SECOND TERM					
MAT	1172	Technical Mathematics 2	4	0	4
PHY	2222	Technical Physics 2	2	3	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
			17	16	21
THIRD TERM					
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
PHY	2223	Technical Physics 3	2	3	3
AVT	8130	Airframe Structures 1	3	7	5
AVT	8132	Aircraft Electrical & Generating Systems	4	6	6
AVT	8143	Airframe Hydraulic & Pneumatic Systems	1	4	2
			14	20	20
FOURTH TERM					
ENG	1001	English Composition 1	3	0	3
AVT	8140	Airframe Structures 2	3	7	5
AVT	8142	Assembly & Rigging	3	7	5

AVT	8151	Landing Gear Systems	3	7	5
			12	21	18
FIFTH TERM					
ENG	1010	Technical Writing 1	3	0	3
AVT	8131	Welding Processes	1	4	2
AVT	8150	Airframe Electronic and Instrument Systems	4	6	6
AVT	8152	Airframe Inspection	1	4	2
AVT	8154	Airframe Systems	4	6	6
			13	20	19
SIXTH TERM					
ENG	1015	Technical Writing 2	3	0	3
ECO	15XX	Economics Elective	3	0	3
AVT	8172	Ignition Systems	4	6	6
AVT	8180	Engine Systems & Inspection	5	5	5
			15	11	17
SEVENTH TERM					
COMM	1020	Public Speaking	3	0	3
AVT	8160	Powerplant Theory & Maintenance 1	5	5	7
AVT	8162	Propellers	4	4	4
CIT	9401	Cooperative Education - Center for Innovative Technologies (Parallel)	1	20	1
			13	29	15
EIGHTH TERM					
PSY	1502	Human Relations-Applied Psychology	3	0	3
AVT	8170	Powerplant Theory & Maintenance 2	5	5	7
AVT	8171	Powerplant Fuel Metering Systems 1	5	5	5
CIT	9401	Cooperative Education - Center for Innovative Technologies (Parallel)	1	20	1
			14	30	16
NINTH TERM					
AVT	8181	Engine Inspection	4	4	5
AVT	8183	Powerplant Theory & Maintenance 3	5	5	7
CIT	9401	Cooperative Education - Center for Innovative Technologies (Parallel)	1	20	1
			10	29	13
TENTH TERM					
PHI	1625	Ethics	3	0	3
AVT	8161	Powerplant Lubrication	3	2	4
AVT	8182	Engine Instruments & Fire Protection	2	3	3
CIT	9401	Cooperative Education - Center for Innovative Technologies (Parallel)	1	20	1
			9	25	11
					168

Economics Elective: ECO 1512, ECO 1513

Avionics Certificate (AVONC)

The Avionics certificate provides advanced skills in aviation electronics for students who are FAA-certified aviation mechanics. When taken in conjunction with the Aviation Maintenance Technology program, the Avionics certificate requires only three additional courses. Graduates are able to troubleshoot and repair, in a flight-line environment, onboard computers, automatic pilot, instrument navigation and communication equipment, and powerplant electronic control systems. Potential employers include corporate aviation departments and airlines. Certification requirements are subject to current Federal Aviation Requirements and may change without notice.

Avionics Certificate

			Hours Per Week Class	Lab	Credit Hours
ENG	1001	English Composition 1	3	0	3
ENG	1010	Technical Writing 1	3	0	3
ENG	1015	Technical Writing 2	3	0	3
MAT	1191	Algebra and Trigonometry 1	3	2	4
MAT	1192	Algebra and Trigonometry 2	4	0	4
PHY	2221	Technical Physics 1	2	3	3
PHY	2222	Technical Physics 2	2	3	3
PHY	2223	Technical Physics 3	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
AVT	8132	Aircraft Electrical & Generating Systems	4	6	6
AVT	8150	Airframe Electronic and Instrument Systems	4	6	6
AVT	8154	Airframe Systems	4	6	6
AVT	8182	Engine Instruments & Fire Protection	2	3	3
AVT	8200	Avionics Orientation	3	2	4
AVT	8201	Avionics 1	3	2	4
AVT	8202	Avionics 2	3	2	4
			65	60	84
					84

Prerequisites for Admission: Scores on the placement test must indicate the student is: a) ready to begin Algebra 1 (MAT 1191); b) ready to begin college English (ENG 1001); c) capable of college reading level.

Aviation Mechanics Certificates (AVAC and AVPC)

The Aviation Maintenance Technology program includes two certificate programs, Aviation Mechanics Airframe and Aviation Mechanics Powerplant. Following successful completion of the Airframe and/or Powerplant certificate requirements, students may take FAA licensing tests. Certification requirements are subject to current Federal Aviation requirements and may change without notice.

Aviation Mechanics Airframe Certificate

			Hours Per Week Class	Lab	Credit Hours
ENG	1001	English Composition 1	3	0	3
ENG	1010	Technical Writing 1	3	0	3
MAT	1171	Technical Mathematics 1	4	0	4
MAT	1172	Technical Mathematics 2	4	0	4
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
PHY	2221	Technical Physics 1	2	3	3
PHY	2222	Technical Physics 2	2	3	3
PHY	2223	Technical Physics 3	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
AVT	8130	Airframe Structures 1	3	7	5
AVT	8131	Welding Processes	1	4	2
AVT	8132	Aircraft Electrical & Generating Systems	4	6	6
AVT	8140	Airframe Structures 2	3	7	5
AVT	8142	Assembly & Rigging	3	7	5
AVT	8143	Airframe Hydraulic & Pneumatic Systems	1	4	2
AVT	8150	Airframe Electronic and Instrument Systems	4	6	6
AVT	8151	Landing Gear Systems	3	7	5
AVT	8152	Airframe Inspection	1	4	2
AVT	8154	Airframe Systems	4	6	6
AVT	8155	Airframe Comprehensive	2	1	2
			73	90	98
					98

Aviation Mechanics Powerplant Certificate

			Hours Per Week Class	Lab	Credit Hours
ENG	1001	English Composition 1	3	0	3
ENG	1010	Technical Writing 1	3	0	3
MAT	1171	Technical Mathematics 1	4	0	4
MAT	1172	Technical Mathematics 2	4	0	4
MAT	1173	Algebra & Trigonometry 2 with Statistics	4	0	4
PHY	2221	Technical Physics 1	2	3	3
PHY	2222	Technical Physics 2	2	3	3
PHY	2223	Technical Physics 3	2	3	3
AVT	8100	Aircraft Orientation	4	4	5
AVT	8101	Materials & Processes 1	2	3	3
AVT	8102	Aerodynamics & FAA Regulations	3	2	3
AVT	8106	Aircraft Drawings	2	2	2
AVT	8107	Materials & Processes 2	4	6	6
AVT	8108	Aircraft Electricity	3	2	3
AVT	8109	Cleaning & Corrosion Control	2	3	3
AVT	8160	Powerplant Theory & Maintenance 1	5	5	7
AVT	8161	Powerplant Lubrication	3	2	4
AVT	8162	Propellers	4	4	4
AVT	8170	Powerplant Theory & Maintenance 2	5	5	7
AVT	8171	Powerplant Fuel Metering Systems 1	5	5	5
AVT	8172	Ignition Systems	4	6	6
AVT	8180	Engine Systems & Inspection	5	5	5
AVT	8181	Engine Inspection	4	4	5
AVT	8182	Engine Instruments & Fire Protection	2	3	3
AVT	8183	Powerplant Theory & Maintenance 3	5	5	7
AVT	8185	Powerplant Comprehensive	2	1	2
			88	76	107
					107

Health and Public Safety Division

Division Phone Number: (513) 569-1670

The Health and Public Safety Division at Cincinnati State brings together in one unit all programs for the education and training of health and public safety personnel as well as the Biological Sciences department. When available, the division's programs are accredited or approved by their respective professional bodies.

The Health and Public Safety Division offers clinically and experientially intensive associate's degree and certificate programs that prepare students to seek employment in their chosen field of study immediately following graduation.

The Biological Sciences department offers a range of courses to meet program needs and to support science requirements for students who seek associate's degrees and wish to transfer to institutions that offer bachelor's degrees.

The Public Safety programs work together under the umbrella of the Center for Safety and Emergency Professions at Cincinnati State, a partnership between Emergency Medical Services, Fire Service Technology, HazMat, Rescue and Safety, and Safety and Security Management. The division, in partnership with Cincinnati State's Workforce Development Center, offers special courses, workshops, seminars, and forums. These programs allow participants to learn new skills or update the knowledge and skills needed to perform effectively on the job.

The division affiliates with area hospitals, health care agencies, fire service organizations, and other educational programs to provide clinical and experiential learning opportunities for health and public safety students.

All degree-seeking students must complete a First Year Experience (FYE) course as a part of the first 18 credit hours taken at Cincinnati State.

Entrance Competencies

In order to ensure a high degree of success in academic studies in health and public safety, entering students must meet established academic levels in mathematics, communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS®, the College admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Cooperative Education

The Health and Public Safety Division supports the College's mission of providing a combination of theory and practice with its well-established tradition of including experience in the clinical setting as an integral part of the educational process. Both clinical and cooperative education components provide students with the practical experience they need to begin work immediately upon graduation. Refer to individual program descriptions for specific information.

Health Excel Services

Health Excel provides Cincinnati State Health and Public Safety Division students with a comprehensive range of educational and professional support services to enhance classroom learning and assist in professional development. Support services available to students include special seminars; individualized tutorial assistance; career, personal, and financial counseling; job shadowing opportunities; mentoring; writing and study skills assistance; and developing a re-entry plan following failure in a technical program.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of this catalog.

Associate's degree programs in the Health and Public Safety Division contain in their curriculums many of the required courses for the Cincinnati State Transfer Module. Students who wish to complete the transfer module should schedule the additional courses at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that the Cincinnati State Associate of Applied Science degree, combined with a transfer module showing grades of C or higher, receives preferential consideration at the receiving institution.

Advanced Health Careers Preparatory Certificate (AHPC)

The Advanced Health Careers Preparatory Certificate provides recognition that a student has completed courses necessary for admission into advanced academic programs in health fields such as Master of Science in Nursing (MSN), Doctor of Pharmacy (Pharm. D.), Doctor of Physical Therapy (PTD), and Physician Assistant (PA). To qualify for admission to the certificate program, students must hold a bachelor's degree from an accredited institution of higher education.

To earn the certificate, a student must complete a minimum of 16 credit hours from the courses listed. If a student does not meet the prerequisites for a listed course, additional courses may be

required. Course selections must be approved by the student's advisor.

BIO 4009	BIO 4081	CHE 2252
BIO 4014	BIO 4082	CHE 2253
BIO 4015	BIO 4083	CHE 2281/CHE 2284
BIO 4016	CHE 2231	CHE 2282/CHE 2285
BIO 4018	CHE 2232	CHE 2283/CHE 2286
BIO 4020	CHE 2233	DT 1202
BIO 4076	CHE 2251	PSY 1515

Biotechnology (BIOT)

Program Chair: Diane K. Vorbroker, PhD

Biotechnology can be defined as "the use of living organisms or their products to enhance our lives and our environment." This is an expanding and exciting field on the leading edge of research and development of new treatment for disease, enhanced agriculture products, pharmaceuticals, clinical research, environmental improvements and biofuels, marine ecosystems, and a whole host of manufacturing and research disciplines. Biotechnicians or "bioscience" workers are usually employed in a laboratory setting and perform procedures such as DNA and genetic engineering, protein technologies, aseptic biomanufacturing, and everything in between. Advanced studies of biology and chemistry, as well as laboratory skills, are desirable to embark upon a career in biotechnology.

Students who successfully complete the Biotechnology program will receive as Associate of Applied Science degree. The completion of the curriculum may lead to employment as a biotechnologist or serve as the first two years of a baccalaureate degree in biotechnology. Coursework includes freshman level biology and chemistry, advanced chemistry, cell biology, genetics, microbiology, basic laboratory techniques, and advanced experimentation in biotechnology as well as a capstone experience. Applicants must have a high school diploma or GED equivalent, and should be proficient in biology and math or take refresher courses in both. Prior laboratory experience is not necessary.

Biotechnology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1151	Intermediate Algebra	3	2	4
BIO	4081	Biology 1	3	4	5
BIOT	4091	Basic Techniques for Biotechnology	2	3	3
			11	9	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
OT	1850	Intro to Computer Applications	3	2	4
CHE	2251	Freshman Chemistry 1	4	3	5
BIO	4082	Biology 2	3	4	5
			13	9	17
THIRD TERM					
MAT	1111	Statistics 1	2	2	3
CHE	2252	Freshman Chemistry 2	4	3	5
BIO	4083	Biology 3	3	4	5
			9	9	13
FOURTH TERM					
MAT	1112	Statistics 2	2	2	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
CHE	2253	Freshman Chemistry 3	4	3	5
XXX	XXXX	Program Elective	3	0	3
			11	7	14
FIFTH TERM					
COMM	1020	Public Speaking	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
COMM	1024	Group Dynamics and Problem Solving	3	0	3
			9	0	9
SIXTH TERM					
ENG	1010	Technical Writing 1	3	0	3
CHE	2232	Fundamentals of Organic Chemistry	3	3	4
BIO	4092	Cell Biology	3	4	5
			9	7	12
SEVENTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
CHE	2233	Fundamentals of Biochemistry	3	3	4
BIOT	4094	Protein Analysis for Biotechnology	2	4	4
			8	7	11
EIGHTH TERM					
BIO	4093	Genetics	3	4	5
EVET	7612	Environmental Microbiology	3	3	4
XXX	XXXX	Social Science Elective	3	0	3
			9	7	12
NINTH TERM					
BIOT	4096	Advanced Techniques for Biotechnology	2	4	4
BIOT	4097	Biotechnology Capstone Project	0	4	2
			2	8	6
					109

Program Elective (choose one): COMM 1021, EVET 7610, PHI 1620, PHI 1625, PHI 1626

Social Science Elective (choose one): PSY 1506, SOC 1523

Biotechnology Certificate (BIOTC)

The Biotechnology Certificate prepares graduates for entry-level jobs in a biological laboratory setting. Graduates may work as laboratory assistants using equipment specific to the biotechnology field, or as technicians in biomanufacturing industries.

The certificate program includes introductory biology and chemistry courses to develop an understanding of the chemical processes of living things. Students also learn and practice laboratory techniques. Biotechnology coursework leads to a capstone project where students design and conduct their own experiment.

Biotechnology Certificate

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4071	Concepts of Biology 1	3	2	4
BIOT	4091	Basic Techniques for Biotechnology	2	3	3
ENG	1001	English Composition 1	3	0	3
OT	1850	Intro to Computer Applications	3	2	4
			11	7	14
SECOND TERM					
BIO	4072	Concepts of Biology 2	3	2	4
BIOT	4096	Advanced Techniques for Biotechnology	0	6	3
COMM	1020	Public Speaking	3	0	3
			6	8	10
THIRD TERM					
BIO	4073	Concepts of Biology 3	3	2	4
BIOT	4094	Protein Analysis for Biotechnology	3	4	5
EVET	7612	Environmental Microbiology	3	3	4
			9	9	13
FOURTH TERM					
BIO	4076	Human Genetics	3	0	3
BIOT	4097	Biotechnology Capstone Project	0	4	2
CHE	2231	Fundamentals of General Chemistry	3	3	4
			6	7	9
					46

Clinical Laboratory Technician Program (CLT)

Program Chair: Janelle Gohn, MT (ASCP) SM

Clinical laboratory technicians play a vital role on the health care team, assisting physicians in diagnosing and treating patients. Students learn scientific theories and employ sophisticated laboratory instruments, equipment, and processes. Clinical laboratory technicians find career opportunities in hospitals, commercial reference laboratories, clinics, research laboratories, government institutions, veterinary laboratories, and industry.

Clinical laboratory technicians perform a full range of laboratory tests from basic body fluid analysis to more complex tests to detect cancer, anemia, diabetes, heart disease, kidney disease, and various infectious diseases. Clinical laboratory technician responsibilities may also include interpreting results, quality control, and quality assurance. They may work in several major areas of the laboratory or specialize in one or two departments within the laboratory such as: chemistry, where they analyze biochemical compounds found in the body including glucose, urea, sodium, potassium chloride, lipids, and enzymes; hematology, where they quantify and analyze red and white blood cells and blood clotting mechanisms; microbiology, where they identify microorganisms found in specimens such as urine, sputum, fluids, and wounds and determine the susceptibility of bacteria to antibiotics; immunohematology, where they determine compatibility of blood transfusions between donor and patient; or immunology/serology, where they examine specimens for antibodies against various diseases.

The Clinical Laboratory Technician program leads to an Associate of Applied Science degree. The program includes two unpaid clinical laboratory rotations and four terms of paid cooperative employment.

The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018-5119, phone: 847.939.3597, E-mail: info@naacls.org. Successful completion of the curriculum enables graduates to apply to take the American Society for Clinical Pathology Board of Certification examination to obtain certification as a Medical Laboratory Technician.

Clinical Laboratory Technician

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	1151	Intermediate Algebra	3	2	4
CHE	2231	Fundamentals of General Chemistry	3	3	4
BIO	4014	Anatomy and Physiology 1	3	2	4
CLT	4301	Basic Laboratory Techniques	2	3	3
CLT	4321	Introduction to Clinical Laboratory Science	0.5	1.5	1
			11.5	11.5	16
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
CHE	2236	Physiological Chemistry	3	3	4
BIO	4015	Anatomy and Physiology 2	3	2	4
CLT	4302	Basic Hematology and Hemostasis	2	6	4
CLT	4303	Basic Urinalysis/Body Fluids	2	3	3
			13	14	18
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
CLT	4304	Clinical Chemistry	3	6	5
CLT	4307	Hematology & Hemostasis 2	2	3	3
CLT	4317	Instrumentation for the Clinical Laboratory	1	3	2
			12	14	17
FOURTH TERM					
COMM	1024	Group Dynamics & Problem Solving	3	0	3
PSY	15XX	Psychology Elective	3	0	3
CLT	4311	Clinical Applications 1 - Hematology and Coagulation	0	6	2
CLT	4312	Clinical Applications 2 - Clinical Chemistry and Urinalysis	0	6	2
CLT	4340	Introduction to Phlebotomy Techniques	0	3	1
CLT	4350	Orientation to the Clinical Lab	0	8	1
			6	23	12
FIFTH TERM					
CLT	4353	Clinical Laboratory Practice	1	40	6
			1	40	6
SIXTH TERM					
CLT	4011	Microbiology Principles and Techniques	2	6	4
CLT	4024	Immunology and Immunochemical Methods	4	3	5
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
			7	29	10
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
CLT	4306	Clinical Microbiology	3	6	5
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
			7	26	9
EIGHTH TERM					
SOC	152X	Sociology Elective	3	0	3
CLT	4305	Immunohematology	3	6	5
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
			7	26	9
NINTH TERM					
BIO	4020	Fundamentals of Pathophysiology	5	0	5
CLT	4309	Clinical Laboratory Seminar	0	3	1
CLT	9374	Parallel Cooperative Education - Clinical Laboratory Technology	1	20	1
XXX	XXXX	Humanities/Social Science	3	0	3
			9	23	10
TENTH TERM					
CLT	4313	Clinical Applications 3 - Immunohematology	0	6	2
CLT	4314	Clinical Applications 4 - Clinical Microbiology	0	6	2
			0	12	4
					111

Humanities Elective: Any ECO, GEO, HST, LBR, CULT, ART, MUS, LIT, PHI, OR POL course.
Psychology Elective: Any PSY course
Sociology Elective: Any SOC course
English Elective: ENG 1003, ENG 1010

Diagnostic Medical Sonography (DMSG and DMSC)

Program Chair, DMSCV: Jackie Turner, RDCS, RVT

The Diagnostic Medical Sonography program at Cincinnati State offers a two-year Associate of Applied Science degree for those who have limited health care experience or are new to the health care field. The program offers students the opportunity to become entry-level diagnostic medical sonographers in the specialty areas of cardiovascular or general imaging sonography.

The curriculum includes a balance of general education and sonography courses in addition to supervised clinical experience obtained on-site at various health care facilities in Greater Cincinnati.

Applicants must be graduates of an accredited high school or give evidence of high school equivalency by GED scores that meet standard core requirements set by the Ohio State Department of Education.

The program is divided into 3 levels of study:
Level I – DMS Pre-Core Level (first and second terms)
Level II – DMS Core Level (third, fourth, and fifth terms)
Level III – DMS Clinical Level (second year)

The accrediting agency of Diagnostic Medical Sonography programs, JRC-DMS, may impose changes for accreditation requirements at any time; therefore, progression requirements for the DMS program are subject to yearly changes. Students are held to the requirements of the year in which they progress to the core level.

Progression from the pre-core to core level of the curriculum requires completion of all prerequisites, including college-level physics, and pre-core level courses with a grade of C or better and an established Cincinnati State overall GPA, program curriculum GPA and a specific science/math GPA of at least 2.75. In addition, there are some non-academic requirements for progression. Therefore, due to the nature of the progression process, meeting with a program advisor is strongly encouraged. The progression process takes place each September.

Once accepted into the core level of the program, students will be required to provide a recent physical exam with up-to-date immunizations, including Hepatitis B and a two-step TB skin test. In addition, students must submit to a background and drug screening.

The program is accredited by The Commission of Accreditation of Allied Health Education Programs (www.caahep.org) in collaboration with the Joint Review Committee of Education in Diagnostic Medical Imaging (JRC-DMS) 6021 University Boulevard, Suite 500, Ellicott City, MD 21043, email address: jrcdms@intersocietal.org.

Upon successful completion of the program, graduates are eligible to take the American Registry of Diagnostic Medical Sonographers national certification examinations.

Diagnostic Medical Sonography Program - Cardiovascular

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State. Students in this program must also complete the following prerequisites: PHY 2245 and BIO 4014. Students holding an associate's or bachelor's degree in an allied health field are eligible for advanced placement. To be considered for advanced placement, the student must meet with the program chair.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1152	Pre-Calculus 1	5	0	5
BIO	4015	Anatomy and Physiology 2	3	2	4
MCH	4006	Medical Terminology 1	3	0	3
			14	2	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
DMS	4630	Survey of Medical Sonography	2	2	3
COMM	1023	Interpersonal Communication	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
			14	4	16
THIRD TERM					
ENG	1003	English Composition 3	3	0	3
BIO	4019	Cross Sectional Anatomy	2	2	3
DMS	4632	Introduction to Diagnostic Medical Sonography	3	0	3
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	2	2	3
			10	4	12
FOURTH TERM					
XXX	XXXX	Humanities/Social Science Elective	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
DMS	4635	Intro to Cardiovascular Scanning	1	2	2
MCH	4805	Patient Care Skills	1	3	2
			8	5	10
FIFTH TERM					
SSM	1000	Disaster Preparedness for Health and Public Safety Workers	2	0	2
BIO	4020	Fundamentals of Pathophysiology	5	0	5
DMS	4636	Principles of Cardiovascular Sonography	2	6	5
			9	6	12
SIXTH TERM					
DMS	4637	Sonographic and Instrumentation 1	3	0	3
DMS	4641	Cardiovascular Clinical 1 - Part 1	1	24	3
DMS	4645	Echocardiography 1	2	2	3
DMS	4648	Vascular Sonography 1	2	2	3
			8	28	12
SEVENTH TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3
DMS	4642	Cardiovascular Clinical 1- Part 2	1	24	3
DMS	4646	Echocardiography 2	2	2	3
DMS	4649	Vascular Sonography 2	2	2	3
			8	28	12
EIGHTH TERM					
DMS	4640	Issues in Sonography	2	0	2
DMS	4643	Cardiovascular Clinical 2 - Part 1	1	24	3
DMS	4647	Echocardiography 3	2	2	3
DMS	4654	Vascular Sonography 3	2	2	3
			7	28	11
NINTH TERM					
DMS	4644	Cardiovascular Clinical 2 - Part 2	1	24	3
DMS	4656	Cardiovascular Specialties	1	2	2
			2	26	5
TENTH TERM					
DMS	4650	Cardiovascular Seminar	2	0	2
DMS	4655	Cardiovascular Clinical 3	1	24	3
			3	24	5
					110

Humanities/Social Science Elective: Any ART, CULT, ECO, GEO, HST, LBR, MUS, LIT, PHI, POL, PSY or SOC course.

Diagnostic Medical Sonography Program - General Imaging

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State. Students in this program must also complete the following prerequisites: PHY 2245 and BIO 4014. Students holding an associate's or bachelor's degree in an allied health field are eligible for advanced placement. To be considered for advanced placement, the student must meet with the program chair.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1152	Pre-Calculus 1	5	0	5
BIO	4015	Anatomy and Physiology 2	3	2	4
MCH	4806	Medical Terminology 1	3	0	3
			14	2	15
SECOND TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
ENG	1002	English Composition 2	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
DMS	4630	Survey of Medical Sonography	2	2	3
COMM	1023	Interpersonal Communication	3	0	3
			14	4	16
THIRD TERM					
ENG	1003	English Composition 3	3	0	3
BIO	4019	Cross Sectional Anatomy	2	2	3
DMS	4632	Introduction to Diagnostic Medical Sonography	3	0	3
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	2	2	3
			10	4	12

			Hours Per Week Class	Lab	Credit Hours
FOURTH TERM					
CULT	1602	Issues in Human Diversity	3	0	3
DMS	4633	Introduction to General Imaging Scanning	1	2	2
MCH	4805	Patient Care Skills	1	3	2
XXX	XXXX	Humanities/Social Sciences	3	0	3
			8	5	10
FIFTH TERM					
SSM	1000	Disaster Preparedness for Health and Public Safety Workers	2	0	2
BIO	4020	Fundamentals of Pathophysiology	5	0	5
DMS	4634	Principles of Abdominal/OB/GYN Sonography	2	6	5
			10	6	12
SIXTH TERM					
DMS	4637	Sonographic Physics and Instrumentation 1	3	0	3
DMS	4672	Clinical Sonography 1 - Part 1	1	24	3
DMS	4676	Abdominal Sonography 1	2	2	3
DMS	4683	OB/GYN Sonography 1	2	2	3
			8	28	12
SEVENTH TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3
DMS	4673	Clinical Sonography 1 - Part 2	1	24	3
DMS	4677	Abdominal Sonography 2	2	2	3
DMS	4684	OB/GYN Sonography 2	2	2	3
			8	28	12
EIGHTH TERM					
DMS	4640	Issues in Sonography	2	0	2
DMS	4674	Clinical Sonography 2 - Part 1	1	24	3
DMS	4678	Superficial and Small Parts Sonography	2	2	3
DMS	4685	OB/GYN Sonography 3	2	2	3
			7	28	11
NINTH TERM					
DMS	4675	Clinical Sonography 2 - Part 2	1	32	5
DMS	4687	Sonography Seminar	2	0	2
DMS	4688	General Imaging Specialities	1	2	2
			4	34	9
					109

Humanities/Social Science Elective: Any ART, CULT, ECO, GEO, HST, LBR, MUS, LIT, PHI, POL, PSY or SOC course.

Diagnostic Medical Sonography Certificates (DMSGC and DMSCC)

Program Chair, DMSCC: Jackie Turner, RDCS, RVT

The Diagnostic Medical Sonography certificate curricula (cardiovascular and general imaging sonography) are an option for students who already have an associate's or bachelor's degree in an allied health field with direct patient care such as nursing, radiography, or respiratory therapy. The curriculum consists of sonography courses and clinical experience at various health care facilities in Greater Cincinnati. In addition to a degree, admission requirements include a current license in the field, current CPR certification, and completion of certificate prerequisites. A maximum of two certificate students for each area of emphasis will be accepted per year on a first come, first served basis. Prospective students must contact the DMS program chair no later than August of the year seeking placement to obtain a start date into the program.

Diagnostic Medical Sonography Program Cardiovascular Certificate

Admission to the Diagnostic Medical Sonography certificate program requires the completion of an Associate Degree in an allied health field or a Bachelor of Science Degree. Students in this program must also complete the following prerequisites: BIO 4019, PHY 2245, EMS 4730, DMS 4632, DMS 4635.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4020	Fundamentals of Pathophysiology	5	0	5
DMS	4636	Principles of Cardiovascular Sonography	2	6	5
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	2	2	3
			9	8	13
SECOND TERM					
DMS	4637	Sonographic Physics and Instrumentation 1	3	0	3
DMS	4641	Cardiovascular Clinical 1 - Part 1	1	24	3
DMS	4645	Echocardiography 1	2	2	3
DMS	4648	Vascular Sonography 1	2	2	3
			8	28	12
THIRD TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3
DMS	4642	Cardiovascular Clinical 1- Part 2	1	24	3
DMS	4646	Echocardiography 2	2	2	3
DMS	4649	Vascular Sonography 2	2	2	3
			8	28	12
FOURTH TERM					
DMS	4640	Issues in Sonography	2	0	2
DMS	4643	Cardiovascular Clinical 2 - Part 1	1	24	3
DMS	4647	Echocardiography 3	2	2	3
DMS	4654	Vascular Sonography 3	2	2	3
			7	28	11
FIFTH TERM					
DMS	4644	Cardiovascular Clinical 2 - Part 2	1	24	3
DMS	4656	Cardiovascular Specialties	3	0	3
			4	24	6
SIXTH TERM					
DMS	4650	Cardiovascular Seminar	2	0	2
DMS	4655	Cardiovascular Clinical 3	1	24	3
			3	24	5
NINTH TERM					
DMS	4656	Cardiovascular Specialties	1	2	2
			1	2	2
					61

Diagnostic Medical Sonography Program - General Imaging Certificate

Admission to the Diagnostic Medical Sonography-Abdominal/Obstetric-Gynecology Certificate program requires the completion of an associate's degree in an allied health field or a Bachelor of Science Degree. Students in this program must also complete the following prerequisites: BIO 4019, PHY 2245, EMS 4730, DMS 4632, DMS 4633.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4020	Fundamentals of Pathophysiology	5	0	5
DMS	4634	Principles of Abdominal/OB/GYN Sonography	2	6	5
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	2	2	3
			9	8	13
SECOND TERM					
DMS	4637	Sonographic Physics and Instrumentation 1	3	0	3
DMS	4672	Clinical Sonography 1 - Part 1	1	24	3
DMS	4676	Abdominal Sonography 1	2	2	3
DMS	4683	OB/GYN Sonography 1	2	2	3
			8	28	12
THIRD TERM					
DMS	4638	Sonographic Physics and Instrumentation 2	3	0	3
DMS	4673	Clinical Sonography 1 - Part 2	1	24	3
DMS	4677	Abdominal Sonography 2	2	2	3
DMS	4684	OB/GYN Sonography 2	2	2	3
			8	28	12

FOURTH TERM					
DMS	4640	Issues in Sonography	2	0	2
DMS	4674	Clinical Sonography 2 - Part 1	1	24	3
DMS	4678	Superficial and Small Parts Sonography	2	2	3
DMS	4685	OB/GYN Sonography 3	2	2	3
			7	28	11
FIFTH TERM					
DMS	4675	Clinical Sonography 2 - Part 2	1	32	5
DMS	4687	Sonography Seminar	2	0	2
DMS	4688	General Imaging Specialities	1	2	2
			4	34	9
					57

Emergency Medical Technician - Paramedic Program (EMTP-S and EMTP-M)

Program Chair: William Mehbod, EMT-P

Emergency Medical Technicians administer life-saving care for the sick and injured. The EMT-Paramedic program includes training in basic and advanced life support. Students learn to apply biophysical and psychosocial principles to the complex practice of the paramedic.

The EMT-Paramedic training program elevates the knowledge and skills of the EMT-Basic to the advanced level. Students are eligible to take the National Registry cognitive and practical exams after successfully completing the five Paramedic Theory and Practice courses.

Students can follow one of two tracks when pursuing the Associate of Applied Science degree: the Management major or the Science major.

EMT Paramedic - Science Major

The Science major gives students a more in-depth look into the causes of many illnesses and disease processes that lead the patient to seek care. Paramedics who are interested in employment in a hospital emergency department in EMS research, EMS education, or in eventually transitioning into other allied health careers may choose the Science major.

EMT Paramedic - Science Major

Prerequisite: EMT-Basic Certification in the State of Ohio.
All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
COMM	1020	Public Speaking	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
XXX	XXXX	Program Elective	2	0	2
			11	2	12
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PHI	1625	Ethics	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
BIO	4016	Anatomy and Physiology 3	3	2	4
			12	4	14
THIRD TERM					
EMS	4740	Paramedic Theory & Practice 1	6	2	7
EMS	4741	Paramedic Clinical Practice 1	1	0	1
			7	2	8
FOURTH TERM					
EMS	4742	Paramedic Theory & Practice 2	6	2	7
EMS	4743	Paramedic Clinical Practice 2	1	10	3
			7	12	10
FIFTH TERM					
EMS	4744	Paramedic Theory & Practice 3	6	2	7
EMS	4745	Paramedic Clinical Practice 3	1	11	3
			7	13	10
SIXTH TERM					
EMS	4746	Paramedic Theory & Practice 4	6	2	7
EMS	4747	Paramedic Clinical Practice 4	1	12	4
			7	14	11
SEVENTH TERM					
EMS	4748	Paramedic Theory & Practice 5	6	2	7
EMS	4749	Paramedic Clinical Practice 5	1	15	4
			7	17	11
EIGHTH TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
BIO	4018	Pharmacology	3	0	3
MCH	4884	Cultural Competency for Health and Public Safety Professions	3	0	3
XXX	XXXX	Program Elective	3	0	3
			12	0	12
NINTH TERM					
ENG	1003	English Composition 3	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
BIO	4009	General Microbiology	3	3	4
XXX	XXXX	Program Elective	3	0	3
XXX	XXXX	Program Elective	3	0	3
			15	3	16
					104

Program Electives: ACC 2924, BIO 4074, BIO 4020, EMS 4773, EMS 4782, FST 4777, LBR 1535, LBR 1537, LBR 1539, MCH 4806, MCH 4807, MCH 4816, MCH 4870, MCH 4871, MCH 4881, MCH 4882, MCH 4885, MCH 4886, SSM 1000, SSM 4XXX
Social Science Electives: Any PSY or SOC course.

EMT Paramedic - Management Major

The Management major prepares students for administrative and supervisory roles within the EMS field.

EMT Paramedic - Management Major

Prerequisite: EMT-Basic Certification in the State of Ohio.
All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
COMM	1020	Public Speaking	3	0	3
LBR	1535	Intro to Labor/Management Relations	3	0	3
MGT	2965	Principles of Management 1	3	0	3
			12	0	12
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
MGT	2966	Principles of Management 2	3	0	3
XXX	XXXX	Informatics Elective	2	0	2
			11	0	11
THIRD TERM					
EMS	4740	Paramedic Theory & Practice 1	6	2	7
EMS	4741	Paramedic Clinical Practice 1	1	0	1
			7	2	8
FOURTH TERM					
EMS	4742	Paramedic Theory & Practice 2	6	2	7
EMS	4743	Paramedic Clinical Practice 2	1	10	3
			7	12	10
FIFTH TERM					
EMS	4744	Paramedic Theory & Practice 3	6	2	7
EMS	4745	Paramedic Clinical Practice 3	1	11	3
			7	13	10
SIXTH TERM					
EMS	4746	Paramedic Theory & Practice 4	6	2	7
EMS	4747	Paramedic Clinical Practice 4	1	12	4
			7	14	11

SEVENTH TERM					
EMS	4748	Paramedic Theory & Practice 5	6	2	7
EMS	4749	Paramedic Clinical Practice 5	1	15	4
			7	17	11
EIGHTH TERM					
PSY	1506	Introduction to Psychology 2	3	0	3
LBR	1537	Negotiation and Dispute Resolution	3	0	3
MCH	4882	Law and Ethics for Health Care	3	0	3
MCH	4884	Cultural Competency for Health and Public Safety Professions	3	0	3
XXX	XXXX	Program Elective	3	0	3
			15	0	15
NINTH TERM					
ENG	1003	English Composition 3	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
FST	4785	Law and Emergency Service Providers	3	0	3
XXX	XXXX	Social Science Elective	3	0	3
XXX	XXXX	Program Elective	3	0	3
			15	0	15
					103

Program Electives: ACC 2924, EMS 4773, EMS 4782, FST 4777, MCH 4806, MCH 4807, MCH 4816, MCH 4870, MCH 4871, MCH 4885, MCH 4886, MGT 1832, MGT 2967, SSM 1000, SSM 4XXX
Informatics Electives: MCH 4002, OT 1850
Social Science elective: Any PSY or SOC

Emergency Medical Technician - Basic Certificate (EMTC)

Program Chair: William Mehbod, EMT-P
This two-term certificate program meets State of Ohio requirements and prepares students to take the EMT-Basic National Registry Exam. Students learn to evaluate the nature and seriousness of patient injuries; assess requirements for emergency care; administer appropriate emergency care to stabilize patient conditions; and lift, move, position, and otherwise handle patients in such a way as to minimize discomfort and further injury. After successfully passing the National Registry Exam, students are eligible to apply for an EMT-Basic certificate in the State of Ohio.

Emergency Medical Technician - Basic Certificate

Prerequisites: DE 0011 and DE 0003 (minimum grade C for both).

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
EMS	4760	Emergency Medical Technician Basic Training 1	3	5	5
			3	5	5
SECOND TERM					
EMS	4761	Emergency Medical Technician Basic Training 2	3	5	5
			3	5	5
					10

Emergency Medical Technician - Paramedic Certificate (EMTPC)

Program Chair: William Mehbod, EMT-P
Students who have already earned an EMT-Basic certificate may elevate their skills to the paramedic level by completing the EMT-Paramedic certificate curriculum approved by the Ohio Department for Public Safety, Division of Emergency Medical Services. After completing the paramedic certificate curriculum, students are eligible to take the national registry exam.

Emergency Medical Technician - Paramedic Certificate

Program prerequisites: College level reading, DE 0020 or equivalent, and EMT-Basic certification from the State of Ohio.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
EMS	4740	Paramedic Theory & Practice 1	6	2	7
EMS	4741	Paramedic Clinical Practice 1	1	0	1
			7	2	8
SECOND TERM					
EMS	4742	Paramedic Theory & Practice 2	6	2	7
EMS	4743	Paramedic Clinical Practice 2	1	10	3
			7	12	10
THIRD TERM					
EMS	4744	Paramedic Theory & Practice 3	6	2	7
EMS	4745	Paramedic Clinical Practice 3	1	11	3
			7	13	10
FOURTH TERM					
EMS	4746	Paramedic Theory & Practice 4	6	2	7
EMS	4747	Paramedic Clinical Practice 4	1	12	4
			7	14	11
FIFTH TERM					
EMS	4748	Paramedic Theory & Practice 5	6	2	7
EMS	4749	Paramedic Clinical Practice 5	1	15	4
			7	17	11
					50

Fire Service Technology (FST)

Program Chair: Phil Vossmeyer, C, P/F
The Fire Service Technology program provides entry-level firefighting and EMT training to those seeking firefighter careers. Other courses targeting leadership, self-discipline, and life skills ensure students a healthy and gratifying career. Graduates of the program earn an Associate of Applied Science degree.

The scope of fire service encompasses many community needs. Many demands, small and large, are placed on fire service providers. Fighting an occasional structure fire, replacing batteries in a neighbor's smoke detector, and extricating injured victims from a vehicle collision are examples of day-to-day activities that fire departments handle. Fire personnel must therefore be trained and cross-trained in diverse subject areas to meet all of these needs.

Applicants must be graduates of an accredited high school or give evidence of high school equivalency by GED scores that meet standard core requirements set by the Ohio State Department of Education. Applicants must have earned a grade of C or higher in high school chemistry, completed within the past seven years. COMPASS® scores must meet program requirements, and the College must receive an official copy of the applicant's high school/college transcripts. In addition, students must earn grades of C or higher in all Fire Service Technology Program courses.

For hands-on fire training class eligibility, students must:
- Successfully perform and complete the Fire Cadet Fitness Evaluation.
- Complete the State Application for Admission to a Fire Training Course. This application screens for age, criminal convictions, and substance abuse that may disqualify students from state certification. Documentation must be provided on questionable cases.
- Have the Physical Exam Form (for firefighters) completed by a qualified physician.
- Obtain a current CPR card for healthcare providers.
- Complete EMT 4760 (Emergency Medical Technician Basic Training 1) course prior to or concurrently with FST 4783.
- Present copies of previous certifications held pertaining to fire fighting and emergency medical services.

An articulation agreement between Cincinnati State and the University of Cincinnati accommodates transition into a baccalaureate degree program for interested Fire Service Technology students.

Fire Service Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.
Program prerequisite: DE 0024 or appropriate placement test mathematics score.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
FST	4748	Principles of Emergency Services	3	0	3
FST	4760	Fire Cadet Basic Training	2	2	3
FST	4772	Fitness for Fire Service Professionals	0	3	1
			8	5	10
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
FST	4764	Fire Prevention	3	0	3
FST	4785	Legal Aspects of the Emergency Services	3	0	3
			12	0	12
THIRD TERM					
FST	4747	Fire Behavior and Combustion	3	0	3
FST	4765	Emergency Vehicle Operator	1	2	2
FST	XXXX	Program Elective 1	8	0	8
			12	2	13
FOURTH TERM					
FST	4757	Fire Service Engines/ Vehicle Maintenance	2	2	3
FST	4784	Firefighter 2	6	6	8
MCH	4816	Health and Wellness Promotion	2	0	2
			10	8	13
FIFTH TERM					
SPN	1090	Spanish for the Professions	3	0	3
PHY	2224	Fire Service Physics	2	3	3
FST	4751	Fireground Operations	3	6	5
FST	4789	Firefighter Internship	0	14	2
			8	23	13
SIXTH TERM					
FST	4763	Fire Protection Hydraulics and Water Supply	3	0	3
FST	4775	Firefighter Agility Skills	1	2	2
FST	4794	Rapid Assistance/Self Rescue Operations	2	4	4
FST	XXXX	Technical Elective	3	0	3
			9	6	12
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
PHI	1625	Ethics	3	0	3
FST	XXXX	Technical Elective	5	0	5
			11	0	11
EIGHTH TERM					
COMM	1020	Public Speaking	3	0	3
EMS	4760	Emergency Medical Technician Basic Training 1	3	5	5
FST	4781	Building Construction for Fire Protection	4	0	4
			10	5	12
NINTH TERM					
EMS	4761	Emergency Medical Technician Basic Training 2	3	5	5
FST	4762	Fire Protection Systems	3	0	3
FST	XXXX	Technical Elective	3	0	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			12	5	14
					110

Technical Electives: (Choose a minimum of eleven credits from the following courses) DT 1202, EET 7736, EVET 7607, EVET 7680, FST 4741, FST 4742, FST 4749, FST 4750, FST 4753, FST 4754, FST 4779, FST 4780, FST 4791, FST 4792, FST 4793, FST 4795, EMS 4763, EMS 4764, PE 4042, PE 4078, SSM 1000, SSM 4001, SSM 4002, SSM 4003, SSM 4004, SSM 4005, TBE 1001, TBE 1002, TBE 1003, TBE 1004, TBE 1005, TBE 1006, TBE 1007, TBE 1008, TBE 1009
English Elective: ENG 1003 or ENG 1010
Humanities/Social Science Elective: CULT 1602 or PSY 1506
Program Elective: FST 4773 and FST 4774 or FST 4783

Fire Service Leadership (FSTL)

Program Chair: Phil Vossmeyer, C, P/F
The Fire Service Leadership program provides education and skills to certified firefighters who are interested in furthering their careers while earning an Associate of Applied Science degree. Firefighters are required to have at least five years experience prior to beginning the second year curriculum of this program. The program was designed to be completed on a part-time basis. Formal training obtained over previous years in the fire service may be awarded college credits.

The scope of fire service encompasses many community needs. Many demands, small and large, are placed on fire service providers and leaders. Leaders in today's fire service must keep up with technologies that influence change within the communities they serve. Leaders must be well-versed in public speaking, and must be informed on issues such as health, nutrition, diversity, standard operating guidelines, and EMS/fire law. Leaders, therefore, must be trained and cross-trained in numerous subject areas to meet the demands placed on them by the department and the community.

Applicants must be graduates of an accredited high school or give evidence of high school equivalency by GED scores that meet standard core requirements set by the Ohio Department of Education. Applicants must have earned a grade of C or higher in high school chemistry completed within the past seven years or complete CHE 2200. COMPASS® scores must meet program requirements, and the College must receive an official copy of the applicant's high school/college transcripts. Students must earn grades of C or higher in all Fire Service Leadership program courses.

Additional requirement: Students must present copies of previous certifications pertaining to fire fighting and emergency medical services.

Fire Service Leadership

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

Program prerequisites: The State of Ohio requires that students must have five years experience in the fire service before enrolling in FST 4743 and DE 0024 or appropriate COMPASS mathematics score. Students may earn up to 60 technical credits through transfer or advanced standing but must earn at least 45 credits at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
FST	4743	Fire and EMS Instructor 1 & 2	5	2	6
FST	4748	Principles of Emergency Services	3	0	3
			11	2	12
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
FST	4764	Fire Prevention	3	0	3
FST	4785	Legal Aspects of the Emergency Services	3	0	3
			12	0	12
THIRD TERM					
FST	4747	Fire Behavior and Combustion	3	0	3
FST	4765	Emergency Vehicle Operator	1	2	2
FST	4783	Firefighter 1	6	6	8
			10	8	13
FOURTH TERM					
FST	4784	Firefighter 2	6	6	8
FST	4786	Fire Officer 1	4	0	4
MCH	4816	Health and Wellness Promotion	2	0	2
			12	6	14

FIFTH TERM					
SPN	1090	Spanish for the Professions	3	0	3
PHY	2224	Fire Service Physics	2	3	3
FST	4751	Fireground Operations	3	6	5
			8	9	11
SIXTH TERM					
FST	4745	Fire Officer 2	4	0	4
FST	4763	Fire Protection Hydraulics and Water Supply	3	0	3
XXX	XXXX	Technical Elective	3	0	3
			10	0	10
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
PHI	1625	Ethics	3	0	3
FST	4746	Fire Officer 3	4	0	4
			10	0	10
EIGHTH TERM					
COMM	1020	Public Speaking	3	0	3
EMS	4760	Emergency Medical Technician Basic Training 1	3	5	5
FST	4781	Building Construction for Fire Protection	4	0	4
			10	5	12
NINTH TERM					
EMS	4761	Emergency Medical Technician Basic Training 2	3	5	5
FST	4762	Fire Protection Systems	3	0	3
XXX	XXXX	Technical Elective	2	0	2
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			11	5	13
					107

Technical Electives: (Choose five credits from the following courses) DT 1202, EET 7736, EVET 7607, EVET 7680, FST 4741, FST 4742, FST 4749, FST 4750, FST 4753, FST 4754, FST 4779, FST 4780, FST 4791, FST 4792, FST 4793, FST 4795, EMS 4763, EMS 4764, PE 4042, PE 4078, SSM 1000, SSM 4001, SSM 4002, SSM4003, SSM 4004, SSM 4005, TBE 1001, TBE 1002, TBE 1003, TBE 1004, TBE 1005, TBE 1006, TBE 1007, TBE 1008, TBE 1009
English Elective: ENG 1003, ENG 1010, ENG 1011
Humanities/Social Science Elective: CULT 1602, PSY 1506

Health and Fitness Technology (HFT)

Program Chair: Jennifer Mayer

Health and Fitness Technology is a two-year Associate of Applied Science degree program that includes a health and fitness internship and practicum. Health and fitness technicians may obtain certification in one or more areas: group fitness instructor, aquatic group fitness, aerobics instructor, personal fitness trainer, yoga instructor, Pilates mat instructor, or resistance training instructor.

Health and fitness technicians work in many areas of health promotion. Technicians may conduct health and fitness screenings and design and lead land and/or aquatic aerobic exercise programs. They may organize special events, health promotion programs, and recreational activities. Health and fitness technicians motivate members, adapt exercises, and monitor safety and progress.

Health and Fitness Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
DT	1202	Nutrition for a Healthy Lifestyle	3	0	3
HFT	4153	Foundations of Exercise Science	3	2	4
HFT	4163	Foundations of Health and Fitness	2	2	3
EMS	475X	CPR Elective	0	1	1
			11	5	14
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
DT	1203	Cooking for a Healthy Lifestyle	1	3	2
BIO	4014	Anatomy and Physiology 1	3	2	4
HFT	4817	Integrative Therapies for Holistic Health	3	2	4
			10	7	13
THIRD TERM					
DT	1204	Nutrition for the Life Cycle	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
PE	40XX	Physical Education Elective	0	2	1
PE	40XX	Physical Education Elective	0	2	1
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			9	6	12
FOURTH TERM					
COMM	102X	Communication Elective	3	0	3
MGT	2967	Introduction to Management	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			12	2	13
FIFTH TERM					
ENG	10XX	English Elective	3	0	3
PHI	1620	Critical Thinking	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
HFT	4XXX	HFT Elective	3	2	4
			10	4	12
SIXTH TERM					
HFT	4161	Health and Fitness Practicum	1	13	2
HFT	4169	Fitness Assessment	2	2	3
HFT	4180	Leading and Developing Exercise Programs	2	2	3
HFT	4XXX	HFT Elective	3	2	4
			8	19	12
SEVENTH TERM					
CULT	1602	Issues in Human Diversity	3	0	3
HFT	4164	Developing Exercise Prescriptions	2	2	3
HFT	4XXX	HFT Elective	2	2	3
XXX	XXXX	Business Elective	3	0	3
			10	4	12
EIGHTH TERM					
HFT	4182	Community Health Assessment	2	2	3
HFT	4183	Health and Fitness Internship	1	16	3
HFT	4XXX	HFT Elective	2	2	3
XXX	XXXX	Business Elective	3	0	3
			8	20	12
					100

Health and Fitness Electives: HFT Elective: HFT 4058, HFT 4060, HFT 4120, HFT 4121, HFT 4122, HFT 4123, HFT 4124, HFT 4144, HFT 4151, HFT 4152, HFT 4154, HFT 4160, HFT 4162, HFT 4165, HFT 4166, HFT 4167, HFT 4168, HFT 4170, HFT 4171, HFT 4172, HFT 4173, HFT 4174, HFT 4175, HFT 4176, HFT 4177, HFT 4178, HFT 4185, HFT 4186
Students may complete HFT electives during any term.
Business Elective: ACC 2924, LAW 1823, LAW 1824, MGT 1832, MGT 2971, MGT 2972, MGT 2988, MGT 2989, MKT 1810, MKT 1844, MKT 2901, MKT 2990
Communication Elective: COMM 1020, COMM 1023, COMM 1024
CPR Elective: EMS 4754, EMS 4755
English Elective: ENG 1003, ENG 1010, ENG 1011
Humanities/Social Science Elective: Any 15XX or 16XX course
Physical Education Elective: Any PE course

Aquatic Group Fitness Instructor Certificate (AFIC)

Program Chair: Jennifer Mayer

The Aquatic Group Fitness Instructor certificate prepares students to design and lead comprehensive aquatic classes, teaching to various fitness levels. After successful completion of the courses graduates are prepared to sit for a National Certification Examination to become a Certified Aquatic Instructor.

Graduates may be employed by health clubs, corporate fitness centers, recreation programs, hospitals, or senior centers. Job activities might include designing safe aquatic classes, scheduling classes, goal setting, and motivation.

Aquatic Group Fitness Instructor Certificate

Admission prerequisites: DE 0003, DE 0010, and DE 0020 or appropriate COMPASS® scores.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4162	Fundamentals of Water Aerobics	2	2	3
EMS	4754	CPR and First Aid for Health Care Professionals	0	2	1
			2	4	4
SECOND TERM					
HFT	4166	Aquatic Group Fitness Instructor	2	2	3
			2	2	3
					7

Group Fitness Instructor Certificate (GFIC)

Program Chair: Jennifer Mayer

Job activities for group fitness instructors may include designing safe traditional and/or step aerobic classes, scheduling classes, setting goals, and motivating participants. After successful completion of the certificate program, graduates are prepared to sit for a national certification examination to become a Certified Group Fitness Instructor. Graduates may work in health clubs, corporate fitness centers, aerobic studios, or recreation programs.

Group Fitness Instructor Certificate

Admission prerequisites: DE 0003, DE 0010, and DE 0020 or appropriate COMPASS® scores.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4160	Fundamentals of Aerobics	2	2	3
EMS	4754	CPR and First Aid for Health Care Professionals	0	2	1
			2	4	4
SECOND TERM					
HFT	4165	Group Fitness Instructor	2	3	3.5
			2	3	3.5
					7.5

Holistic Yoga Instructor Certificate (YTC)

Program Chair: Jennifer Mayer

The Holistic Yoga Instructor certificate is a 200-hour interdisciplinary yoga teacher-training program encompassing many aspects of the yoga practice. It is designed for those who have been previously introduced to yoga or meditation. Students begin to deepen their personal practices as their teaching skills evolve through experiential learning. Graduates from the program are able to design yoga sequences for healthy adults as well as introduce children, teen, and senior citizen routines.

The goal of this training is to encourage practitioners to unfold the mind-body-spirit connection that is vital to the practice of yoga and to pass these experiences on to their students. Students are encouraged and supported to achieve "living yoga" through a variety of educational and hands-on techniques. After successfully completing the curriculum, students are qualified for registration with the National Yoga Alliance as a Registered Yoga Teacher at the 200-hour level.

Holistic Yoga Instructor Certificate

This 360-hour certification prepares students for registration through the National Yoga Alliance.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4141	Fundamentals of Yoga	1	2	2
HFT	4142	Yoga Teaching Methodology	1	2	2
HFT	4143	Building a Personal Yoga Sequence	0	2	1
			2	6	5
SECOND TERM					
HFT	4144	Yoga Techniques & Practices 1	1	4	3
HFT	4145	Anatomy of Hatha Yoga	2	0	2
HFT	4148	Yogic Nutritional Lifestyle	2	0	2
HFT	4149	Yoga Practicum 1	1	5	2
			6	9	9
THIRD TERM					
HFT	4146	Yoga Techniques & Practices 2	1	4	3
HFT	4147	Philosophy & Ethics of Yoga	2	0	2
HFT	4150	Yoga Practicum 2	1	5	2
			4	9	7
					21

Personal Fitness Trainer Certificate (PFTC)

Program Chair: Jennifer Mayer

The Personal Fitness Trainer certificate program prepares students to develop safe fitness programs focused on health maintenance for healthy individuals.

Graduates may be employed by health clubs, fitness centers, or wellness centers. Job activities include fitness testing and risk factor identification, conducting individual and group exercise programs, counseling in behavior modification, and designing individualized fitness programs.

After successful completion of the program graduates are prepared to sit for a national examination to become a Certified Personal Fitness Instructor.

Personal Fitness Trainer Certificate

Admission prerequisites: DE 0005, DE 0011, and DE 0024 or appropriate COMPASS® scores.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4153	Foundations of Exercise Science	3	2	4
EMS	4754	CPR and First Aid for Health Care Professionals	0	2	1
			3	4	5
SECOND TERM					
HFT	4170	Personal Fitness Trainer 1	3	2	4
			3	2	4
THIRD TERM					
HFT	4171	Personal Fitness Trainer 2	3	2	4
			3	2	4
					13

Pilates Mat Instructor Certificate (PMIC)

Program Chair: Jennifer Mayer

The Pilates Mat Instructor certificate program prepares students to develop safe and effective Pilates mat exercise classes to a variety of fitness levels. Individuals who complete this certificate are prepared to teach Pilates mat to people of all body types, ages, and physical conditions. Graduates may be employed by health clubs, wellness centers, and university recreation centers. After successful completion of the course, graduates are prepared to sit for the

national certification examination to become a Certified Pilates Mat Instructor.

Pilates Mat Instructor Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4121	Fundamentals of Pilates Mat	2	2	3
EMS	4754	CPR and First Aid for Health Care Professionals	0	2	1
			2	4	4
SECOND TERM					
HFT	4123	Pilates Mat Instructor	2	2	3
			2	2	3
THIRD TERM					
HFT	4124	Pilates Mat Practicum	1	5	2
			1	5	2
					9

Resistance Training Certificate (RSTC)

Program Chair: Jennifer Mayer

The Resistance Training certificate prepares students to develop safe, effective, and efficient resistance training programs. Students evaluate biomedical, physiological, and genetic factors affecting strength and muscle tissue gain and learn proper form, technique, and spotting for resistance exercises using body weight, free weights, resistance machines, and other resistance-training disciplines. Proper program design and implementation are applied to both healthy adults and special populations.

Graduates may be employed as corporate, community, or hospital-based fitness and personal resistance program trainers.

Resistance Training Certificate

Admission Prerequisites: DE 0003, DE 0010, and DE 0020 or appropriate COMPASS® scores.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
HFT	4185	Fundamentals of Resistance Training	2	2	3
EMS	4754	CPR and First Aid for Health Care Professionals	0	2	1
			2	4	4
SECOND TERM					
HFT	4186	Resistance Training Development and Implementation	2	2	3
			2	2	3
					7

Health Information Management Technology (HIM)

Program Chair: Cindy Kneip, RHIA

Health Information Management Technology focuses on managing health care data, and using health information technology. Students learn to collect, integrate, and analyze primary and secondary health care data; disseminate information; and manage information resources related to the research, planning, provision, payment, and evaluation of health care services. A career in health information management offers the opportunity to pursue a business-related career that is essential to insuring quality patient care.

The HIM program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates earn an Associate of Applied Science degree and are eligible to take the national certification examination for health information technicians. After successful completion of this exam, the individual is designated as a Registered Health Information Technician (RHIT).

Some non-core courses must be taken on the main campus; most other HIM courses are offered on the Internet or have an Internet component.

Health Information Management Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4002	Informatics in Health Care	1	2	2
BIO	4073	Concepts of Biology 3	3	2	4
HIM	4400	Introduction to Health Information Management	3	2	4
MCH	4806	Medical Terminology 1	3	0	3
			10	6	13
SECOND TERM					
BIO	4074	Human Disease	3	0	3
HIM	4407	Health Record Content and Format	2	2	3
HIM	4415	Legal Aspects of Health Information	3	0	3
MCH	4807	Medical Terminology 2	3	0	3
			11	2	12
THIRD TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1502	Human Relations-Applied Psychology	3	0	3
HIM	4411	Clinical Abstracting	2	4	4
HIM	4420	Basic ICD-9-CM Coding	2	2	3
HIM	4428	Professional Practice 1	1	4	2
			11	10	15
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
OT	1863	Electronic Spreadsheets (Excel)	2	2	3
HIM	4417	Health Data Analysis and Presentation	3	2	4
HIM	4421	Intermediate ICD-9-CM Coding	3	2	4
			11	6	14
FIFTH TERM					
COMM	102X	Communication Elective	3	0	3
HIM	4410	Basic CPT Coding	3	2	4
HIM	4432	Alternative Health Record Systems	3	0	3
			9	2	10
SIXTH TERM					
HIM	4401	Health Care Information Technology Systems	2	2	3
HIM	4449	Medical Billing Procedures	2	4	4
HIM	4451	Intermediate CPT Coding	3	2	4
XXX	XXXX	Program Elective	3	0	3
			10	8	14
SEVENTH TERM					
HIM	4419	Health Information Management Technology Systems Skills Lab	0	3	1
HIM	4422	Clinical Classification Systems	2	2	3
HIM	4450	Reimbursement Methodologies	2	2	3
XXX	XXXX	Humanities/Social Science	3	0	3
			7	7	10
EIGHTH TERM					
HIM	4431	Health Information Department Management	4	0	4
HIM	4452	Coding Skills Clinical Lab	0	3	1
HIM	4453	Quality Assessment in Health Information Management	3	0	3
XXX	XXXX	Humanities/Social Science	3	0	3
			10	3	11
NINTH TERM					
ENG	10XX	English Elective	3	0	3
HIM	4429	Professional Practice 2	1	4	2
HIM	4491	Health Information Management Seminar	3	0	3
HIM	4492	Health Information Management Current Topics	1	0	1
			8	4	9
					108

Humanities/Social Science Elective (Must choose coursework from at least two of the departments listed)
ECO, GEO, HST, LBR, CULT, ART, MUS, LIT, PHI, POL, PSY or SOC
Program Electives (3 credits from one or more of the following): HIM 4499, HIM 9373, MCH 4881, MCH 4882, MCH 4885, MCH 4886, OT 3005, OT 3093
Communication Elective: COMM 1020, COMM 1024
English Elective: ENG 1010, ENG 1003

Coding Specialist Certificate (COC)

Program Chair: Cindy Kneip, RHIA
The Coding Specialist certificate program prepares students for entry-level coding positions in outpatient clinics, physician group practices, billing companies, and insurance companies. Students learn to accurately determine code assignments using ICD-9-CM and CPT code sets. In many instances, financial reimbursement is tied to these numeric coding assignments.

Coding Specialist Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4002	Informatics in Health Care	1	2	2
BIO	4073	Concepts of Biology 3	3	2	4
HIM	4400	Introduction to Health Information Management	3	2	4
MCH	4806	Medical Terminology 1	3	0	3
			10	6	13
SECOND TERM					
BIO	4074	Human Disease	3	0	3
HIM	4407	Health Record Content and Format	2	2	3
MCH	4807	Medical Terminology 2	3	0	3
			8	2	9
THIRD TERM					
HIM	4411	Clinical Abstracting	2	4	4
HIM	4420	Basic ICD-9-CM Coding	2	2	3
			4	6	7
FOURTH TERM					
HIM	4421	Intermediate ICD-9-CM Coding	3	2	4
			3	2	4
FIFTH TERM					
HIM	4410	Basic CPT Coding	3	2	4
			3	2	4
SIXTH TERM					
HIM	4449	Medical Billing Procedures	2	4	4
HIM	4451	Intermediate CPT Coding	3	2	4
			5	6	8
SEVENTH TERM					
HIM	4450	Reimbursement Methodologies	2	2	3
HIM	4452	Coding Skills Clinical Lab	0	3	1
HIM	4422	Clinical Classifications Systems	2	2	3
			4	7	7
					52

Law Enforcement (ATSLE)

Advisor: Bob Baylor
The Associate of Technical Studies in Law Enforcement program is designed to qualify individuals currently working in law enforcement for advancement within their field. In addition, it provides an opportunity for certified Ohio police/peace officers to obtain a two-year college degree.

Associate of Technical Studies - Law Enforcement

To enroll in this program, a student must present proof of certification of OPOTA training.
All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CRJ	1299	Special Studies-Criminal Justice	45	0	45
			45	0	45
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
CULT	1602	Issues in Human Diversity	3	0	3
			12	0	12
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
COMM	102X	Communication Elective	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
MGT	2967	Introduction to Management	3	0	3
			15	0	15
FOURTH TERM					
COMM	1024	Group Dynamics & Problem Solving	3	0	3
ENG	10XX	English Composition Elective	3	0	3
PSY	1507	Abnormal Psychology	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
PHI	1625	Ethics	3	0	3
			15	0	15
FIFTH TERM					
CRJ	12XX	Criminal Justice Elective	3	0	3
PSY	1510	Adolescent Development	3	0	3
XXX	XXXX	Arts/Humanities Elective	3	0	3
MGT	XXXX	Management Elective	3	0	3
XXX	XXXX	Arts/Humanities Elective	3	0	3
			15	0	15
					102

Communication Elective: COMM 1020, COMM 1023
English Composition Elective: ENG 1003, ENG 1010
Arts/Humanities Elective: PHI 1621, PHI 1630, PHI 1631, LIT 1040, LIT 1045, LIT 1050, LIT 1051, LIT 1052, LIT 1053, LIT 1055, LIT 1056, LIT 1057, SPN 1090, SPN 1080, ITP 1086 Criminal Justice Elective: CRJ 1251, CRJ 1253, CRJ 1254, CRJ 1255, CRJ 1257, CRJ 1298
Management Elective: MGT 1832, MGT 2996

Multicompetency Health Technician (MCH)

Program Chair: Daphne Robinson, RHIT
The Multicompetency Health Technician program offers a flexible, innovative curriculum that meets the needs of a changing health care marketplace. While working toward an Associate of Applied Science degree, students learn to perform multiple functions in more than one discipline.

While few employment advertisements read "Multicompetent Health Technician wanted," there are many jobs requiring multiple skills. Most graduates practice in the area of one of their completed certificates while some obtain leadership roles in the certificate area they emphasized as students. Graduates work in acute care hospitals, subacute care centers, ambulatory care settings, community health care centers, health maintenance organizations, physician offices and clinics, retirement facilities, and long-term care facilities.

General Education Requirements: 21 credit hours total
- Communication Skills (12 credit hours) including written and oral communication courses
- Social/Behavioral Sciences (6 credit hours)
- Arts and Humanities (3 credit hours)

Basic Studies Requirements: 24 credit hours total
- Sciences (20 credit hours)
- Math (4 credit hours)

Core Technical Requirements: 26 credit hours total
- Medical Terminology
- Introduction to Health Care System

- Health Care Informatics
- Patient Care Skills
- Health Care Electives (6)
- Informatics
- Problem Solving
- CPR First Aid
- Electives 4881, 4882, 4885, 4886, 4808

Certificate Courses: A minimum of 32 credit hours of coursework. Students must choose a minimum of two certificates from the following:

Certificate Program	Credit Hours
Coding Specialist	32
Community Health Worker	18
Electrocardiography Basic	4
Electrocardiography Advanced-Arrhythmia Recognition	3
Electroneurodiagnostic	38
EMT Basic	9
Health Unit Coordinator	16
Home Health Care Aide	2
Medical Assistant	34
Medication Aide	9
Nurse Aide	6
Orthopaedic	26
Patient Care Assistant	3
Personal Fitness Trainer	10
Restorative Aide	2

Other extended health care certificates with Program Chair consent.

Multicompetency Health Technician

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.
Division chemistry prerequisites: high school chemistry with a grade of C or higher within last seven years or both CHE 2202 and CHE 2203, or other equivalent college course.
Program biology prerequisites: high school biology with a grade of C or higher within last 7 years or completion of BIO 4073, or equivalent college course.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
MCH	4001	Introduction to the Health Care System	2	0	2
MCH	4806	Medical Terminology 1	3	0	3
XXX	XXXX	Program Certificate Elective	0	0	0
			8	0	8
SECOND TERM					
COMM	1020	Public Speaking	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
MCH	4807	Medical Terminology 2	3	0	3
XXX	XXXX	Program Certificate Elective	0	0	0
			7	2	8
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
MCH	4805	Patient Care Skills	1	3	2
XXX	XXXX	Program Certificate Elective	0	0	0
			10	5	12
FOURTH TERM					
ENG	1003	English Composition 3	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
MCH	4840	Orientation to the Health Record and Legal Issues	2	2	3
MCH	4884	Cultural Competency for Health and Public Safety Professions	3	0	3
XXX	XXXX	Program Certificate Elective	0	0	0
			11	4	13
FIFTH TERM					
SSM	1000	Disaster Preparedness for Health and Public Safety Workers	2	0	2
BIO	4016	Anatomy and Physiology 3	3	2	4
MCH	4882	Law and Ethics for Health Care	3	0	3
XXX	XXXX	Program Certificate Elective	0	0	0
			8	2	9
SIXTH TERM					
SOC	1521	Introduction to Sociology 1	3	0	3
PHI	1620	Critical Thinking	3	0	3
BIO	4009	General Microbiology	3	3	4
BIO	4074	Human Disease	3	0	3
XXX	XXXX	Program Certificate Elective	0	0	0
			12	3	13
SEVENTH TERM					
EMS	4730	CPR for Health Care Professionals	0	2	1
MCH	4816	Health and Wellness Promotion	2	0	2
XXX	XXXX	Program Certificate Elective	0	0	0
XXX	XXXX	Program Certificate Elective	0	0	0
			2	2	3
EIGHTH TERM					
HFT	4818	Survey of Alternative and Complementary Medicine	3	0	3
XXX	XXXX	Program Certificate Elective	0	0	0
XXX	XXXX	Program Certificate Elective	0	0	0
			3	0	3
					69

Students must complete at least two of the following certificates for a total of 30 to 36 hours. Aquatic Group Fitness: HFT 4162, HFT 4166, HFT 4167 Coding Specialist: HIM 4407, HIM 4410, HIM 4411, HIM 4420, HIM 4421, HIM 4449, HIM 4450, HIM 4452 Community Health Worker: CHW 4826, CHW 4827, CHW 4828, EMS 4732, MCH 4805, MCH 4816, MCH 4884 Electroneurodiagnostic Technologist: END 4200, END 4201, END 4210, END 4220, END 4221, END 4222, END 4230, END 4231, END 4232, END 4240, END 4241, END 4250, END 4251, END 4260, END 4261, MCH 4870, MCH 4871 EMT Basic: EMS 4760, EMS 4761 EMT Paramedic: EMS 4762, EMS 4763, EMS 4764, EMS 4765, EMS 4766, EMS 4767 EKG Basic & Advanced: MCH 4870, MCH 4871 Group Fitness Trainer: HFT 4160, HFT 4165 Health Unit Coordinator: MCH 4841, MCH 4842 Holistic Yoga Instructor: HFT 4141, HFT 4142, HFT 4143, HFT 4144, HFT 4145, HFT 4146, HFT 4147, HFT 4148, HFT 4149, HFT 4150 Medical Assistant Certificate: MA 4200, MA 4201, MA 4202, MA 4204, MA 4205, MA 4209, MA 4211 Medication Aide: MCH 4803, MCH 4804 Nurse Aide Training: MCH 4810 Orthopaedic Technician: ORTH 4201, ORTH 4202, ORTH 4210, ORTH 4211, ORTH 4220, ORTH 4221 Personal Fitness Trainer: HFT 4153, HFT 4170, HFT 4171 Resistance Training: HFT 4185, HFT 4186 Program Electives: Any MCH course not used in a certificate, FST 4749, FST 4750 ***Other healthcare certificates may be used only with permission of the MCH program chair.

Community Health Worker Certificate

Program Chair: Mary Kappesser, RN

Community Health Workers are trained advocates in communities where they are connected by culture, language, or residence. They empower individuals to access health and community resources through education, outreach, home visits, mentoring, and referrals. In Ohio, Community Health Workers are certified by the Ohio Board of Nursing.

This three-term certificate program prepares students to work in diverse settings, including community-based health and social service agencies and home visitation programs. Practicum experiences in the community are a major component of the certificate. Successful Cincinnati State Community Health Worker program graduates are compassionate and committed individuals able to positively impact the health of the communities they serve. They are competent in a number of skill areas, including, written and oral communication, interviewing and data collection, obtaining vital signs, mentoring, community and client advocacy, referral to community resources, basic health promotion, and cultural competency.

Applicants must be graduates of an accredited high school or present evidence of high school equivalency by GED. Additionally, two recommendations are required including an employer and a community-based program for which you have worked (paid or unpaid). A minimum grade of C is required in all courses. An

acceptable Bureau of Criminal Identification and Investigation (BCI&I) report is required. Please contact the program chair for further information.

Community Health Worker Certificate

Students must meet with the program chair prior to enrolling in this program.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
EMS	4735	BLS for Healthcare Providers	0	1	0
MCH	4816	Health and Wellness Promotion	2	0	2
CHW	4825	Community Health Worker 1	3	5	5
			5	6	7
SECOND TERM					
CHW	4827	Community Health Worker 2	3	5	5
MCH	4884	Cultural Competency for Health and Public Safety Professions	3	0	3
			6	5	8
THIRD TERM					
CHW	4828	Community Health Worker Practicum and Seminar	1	8	3
			1	8	3
					18

Electrocardiography (Basic) Certificate

Program Chair: Daphne Robinson, RHIT

This course acquaints students with the basic principles of electrocardiography. The course covers topics in the electrical conductive system of the heart, patient preparation, setting up the ECG machine, and recognizing and correcting distortion problems.

Electrocardiography (Basic) Certificate

			Hours Per Week Class	Lab	Credit Hours
ONE TERM CERTIFICATE					
MCH	4870	Basic Electrocardiography	3	2	4

Electrocardiography (Advanced) - Arrhythmia Recognition Certificate

Program Chair: Daphne Robinson, RHIT

This course is a continuation of the Basic ECG certificate with special emphasis on recognizing arrhythmias. After reviewing basic ECG principles, students learn interpretation of various types of atrial function and ventricular dysrhythmias, performance measurement, and calculation to aid in interpretation of electrocardiograms.

Electrocardiography (Advanced) - Arrhythmia Recognition Certificate

			Hours Per Week Class	Lab	Credit Hours
ONE TERM CERTIFICATE					
MCH	4871	Advanced Arrythmia	3	0	3

Electroneurodiagnostic Technology Program (END)

Program Chair: Debra Carson

The Electroneurodiagnostic Technology certificate program prepares students to function in several roles in hospital or clinic environments. END technologists perform primarily non-invasive procedures that measure and assess electrical patterns of the brain to determine abnormalities of the central nervous system. They assist the physician in diagnosing specific diseases and disorders such as epilepsy, stroke, and trauma and in many locations including the operating room where they perform intracranial electrode placement and recording. The program is available either as an associate's degree in the Multicompetency Health technology program, or as a seven-term certificate for credentialed graduates of other associate's degree health programs.

Graduates of the program are eligible to take the American Board of Registration of Electroencephalographic and Evoked Potential Technologists exam, following a post-graduation work requirement. The College is in the process of applying for accreditation through the Commission on Accreditation of Allied Health Education Programs (CAAHEP) and the Committee on Accreditation for Education in Electroneurodiagnostic Technology (CoA-END).

Degree-seeking students must satisfy certain division and program prerequisites before they are admitted to the degree program. It is highly recommended that both degree-seeking and certificate students meet with the program chair within their first term at Cincinnati State.

Electroneurodiagnostic Technology

Program math prerequisite: MAT 1105 or DE 0025. Students wishing to complete the END Certificate must either be enrolled in the MCH degree program, or must be graduates of a two-year or four-year health-related program. Non-degreed Multicompetency END students must earn an MCH degree in order to be eligible to take the credentialing exams.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
END	4200	Introduction to Electroneurodiagnostic Technology	3	0	3
END	4201	Introduction to Neuroscience	2	2	3
			5	2	6
SECOND TERM					
END	4210	EEG Instrumentation and Recording	2	2	3
MCH	4870	Basic Electrocardiography & Arrhythmia Recognition	2	2	3
			4	4	6
THIRD TERM					
END	4220	EEG Laboratory Management	2	2	3
END	4221	EEG Clinical Correlations	2	0	2
END	4222	EEG Directed Clinical Practice	0	16	2
MCH	4871	Advanced Arrhythmia Recognition	3	0	3
			7	18	10
FOURTH TERM					
END	4230	Introduction to Evoked Potential	2	0	2
END	4231	Evoked Potential Clinical Correlations	2	2	3
END	4232	Evoked Potential Directed Clinical Practice	0	16	2
			4	18	7
FIFTH TERM					
END	4240	Intraoperative Monitoring	1	0	1
END	4241	Intraoperative Monitoring Directed Clinical Practice	0	16	2
			1	16	3
SIXTH TERM					
END	4250	EEG Long-term and Invasive Monitoring	1	0	1
END	4251	Long-term and Invasive Monitoring Directed Clinical Practice	0	16	2
			1	16	3
SEVENTH TERM					
END	4260	END Board Exam Review	1	0	1
END	4261	END Clinical Capstone	0	16	2
			1	16	3
					38

Health Unit Coordinator Certificate (UCMR)

Program Chair: Daphne Robinson, RHIT

The Health Unit Coordinator certificate program is for students who wish to develop marketable skills as entry-level medical clerical workers. Job duties include: assembling and maintaining patient charts; processing doctor's orders; processing admissions, transfers, and discharges; and scheduling diagnostic procedures.

The program consists of coursework covering Health Unit Coordinator procedures and communication skills. There is a non-paid clinical rotation at an area health care organization along with additional classes. Students may take most of the courses for this program via the Internet.

The program meets the standards of education as published by the National Association of Health Unit Coordinators. Completion of the program qualifies students to take the National Certification Exam for Health Unit Coordinators.

Health Unit Coordinator Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MCH	4806	Medical Terminology 1	3	0	3
MCH	4840	Orientation to the Health Record and Legal Issues	2	2	3
MCH	4841	Unit Coordinator Procedures 1	2	2	3
			7	4	9
SECOND TERM					
MCH	4807	Medical Terminology 2	3	0	3
MCH	4842	Unit Coordinator Procedures 2	2	4	4
			5	4	7
					16

Medical Assistant Certificate (MAC)

Program Chair: Holly Elliott, RMA

Medical Assistants are multicompetent, multiskilled professionals who perform administrative, clinical, and management functions. They keep up with the dynamic changes in health care and medical practice organizations.

The Medical Assistant certificate program prepares students to work in physicians' offices providing patient care, performing administrative tasks, and managing the medical office. Administrative tasks include: filing, scheduling appointments, handling correspondence, maintaining patient records, office management, billing, bookkeeping, and completing insurance forms. Clinical tasks involve: taking and recording medical histories, preparing patients for examinations, assisting with examinations and office surgeries, measuring vital signs, performing therapeutic and diagnostic tests, and giving injections. As managers, Medical Assistants manage patient care, office personnel, and physician time.

During this one-year program, students complete supervised clinical practices to develop medical assisting competencies. Students who complete the program earn a Medical Assistant technical certificate (MAC) and are eligible to take the AAMA examination to become a Certified Medical Assistant (CMA). The Medical Assistant certificate is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (AAMAE). Commission on Accreditation of Allied Health Education Programs, 1361 Park Street, Clearwater, FL 33756, phone: (727) 210-2350.

Medical Assistant Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4073	Concepts of Biology 3	3	2	4
MA	4202	Clinical Procedures 1	2	3	3
MCH	4002	Informatics in Health Care	1	2	2
MCH	4806	Medical Terminology 1	3	0	3
PSY	1515	Lifespan Development	3	0	3
			12	7	15
SECOND TERM					
BIO	4074	Human Disease	3	0	3
ENG	1001	English Composition 1	3	0	3
MA	4204	Medical Laboratory Procedures 1	2	3	3
MCH	4807	Medical Terminology 2	3	0	3
SSM	1000	Disaster Preparedness for Health and Public Safety Workers	2	0	2
			13	3	14
THIRD TERM					
MA	4203	Clinical Procedures 2	2	3	4
MA	4205	Medical Laboratory Procedures 2	2	3	3
MA	4210	Medical Office Insurance and Coding	3	0	3
			7	6	10
FOURTH TERM					
MA	4220	Pharmacology for Medical Assistants	3	0	3
MA	4221	Medical Administrative Procedures	2	3	4
MA	4245	Medical Office Billing and Reimbursement	3	0	3
			8	3	10
FIFTH TERM					
MA	4209	Medical Assistant Seminar	2	0	2
MA	4211	Medical Assisting Externship 1	1	20	4
			3	20	6
					55

Medication Aide Certificate (MDADC)

Program Director: Laurel Alfieri, RN

The Medication Aide certificate focuses on basic concepts of anatomy, physiology, and pharmacology as required by State of Ohio regulations. The course includes a minimum of 80 hours of lecture and lab practice to prepare students to distribute medications in long-term care and residential care facilities. Students spend at least 40 hours of clinical practice actually passing medications under the direct supervision of a licensed nurse in a long term care and/or residential care facility. Students research and prepare medication information for each resident in their assignment. Upon successful completion of the program, students are eligible to take the exam approved by the Ohio Board of Nursing and apply to become licensed Medication Aides in Ohio. Students must obtain a physical and two-step TB test prior to starting the program and a background check before licensure.

Medication Aide Certificate

To satisfy State of Ohio requirements, both MCH 4803 and MCH 4804 must be taken in the same term.

			Hours Per Week Class	Lab	Credit Hours
MCH	4803	Medication Aide	7	6	9
MCH	4804	Medication Aide Clinical Practice	0	4	1
			7	10	10
					10

Nurse Aide Training Certificate

Program Director: Laurel Alfieri, RN

The Nurse Aide Training certificate teaches the skills needed to care for patients in a nursing home or long-term care facility. These skills include making beds, checking temperatures, monitoring pulse

and respiration, giving baths and back rubs, understanding infection control precautions, feeding residents, and lifting safely to accomplish tasks without injury to self or residents. Students practice these skills in a simulated patient room and apply them in long-term care facilities with guidance from professional instructors.

Upon successful completion of the program, students are eligible to take the competency test offered by the Ohio Department of Health.

Students must obtain a health history, physical, and two-step PPD prior to starting the program.

Nurse Aide Training Certificate

		Hours Per Week Class	Lab	Credit Hours
One Term Certificate				
MCH 4810	Nurse Aide Training	4	6	6

Orthopaedic Technology Certificate (ORTH)

Program Director: Timothy Hill, OT-C

Orthopaedic Technology is a certificate program within the Multicompetency Health Technician program that prepares students to work with orthopaedic surgeons in treating patients in a variety of health care environments. The certificate program provides the skills and knowledge needed to become a competent orthopaedic technologist performing routine office and departmental procedures; applying, adjusting, and removing casts, splints, and braces; setting up, adjusting, and maintaining traction; assisting with the care of acutely injured patients; and assisting the physician in the surgical suite treating orthopaedic injuries. The OT also fits and adjusts canes, crutches, and walkers, and instructs patients on the care and use of their equipment and casts. Graduates are employed in hospitals, clinics, and private practice offices.

Students may seek a degree in the Multicompetency Health area or may choose to pursue the Orthopaedic Technology program as a stand-alone certificate. Both certificate and degree-seeking students must satisfy certain division and program prerequisites before they are admitted to the program. It is highly recommended that both degree-seeking and certificate students meet with the program director within their first term at Cincinnati State. Call (513) 569-1670 for further information.

Orthopaedic Technology Certificate

Students must meet division DE reading and writing requirements, and must have completed DE 0024.

		Hours Per Week Class	Lab	Credit Hours
FIRST TERM				
EMS 4735	BLS for Healthcare Providers	0	1	0
MCH 48XX	Medical Terminology Elective	6	0	6
		6	1	6
SECOND TERM				
ORTH 4201	Survey of Anatomy and Physiology for Orthopaedic Technology	2	0	2
ORTH 4202	Radiology for Orthopaedic Tech	3	2	4
		5	2	6
THIRD TERM				
ORTH 4210	Orthopaedic Techniques 1	4	2	5
ORTH 4211	Orthopaedic Clinical Practice 1	0	4	2
		4	6	7
FOURTH TERM				
ORTH 4220	Orthopaedic Techniques 2	4	2	5
ORTH 4221	Orthopaedic Clinical Practice 2	0	4	2
		4	6	7
				26

Medical Terminology Elective: MCH 4815; or MCH 4806 and MCH 4807

The Cincinnati State Bethesda School of Nursing (NUR and NURP)

Program Chair/Director: Denise Rohr, RN, MSN
Program Coordinator/Assistant Director: Joanne Johnson, RN, MSN
Program Chair, LPN-RN: Jeri Hancox, RN, MSN, FNP-BC

The Bethesda School of Nursing prepares graduate nurses who are eligible to take the national standardized nursing examination (NCLEX-RN) and upon passing, work as registered nurses.

The program is approved by the Ohio Board of Nursing and is accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA, phone: (404) 975-5000. Graduates are members of the health team prepared to provide nursing care to clients with common health problems in a variety of settings.

Applicants must be graduates of an accredited high school or give evidence of high school equivalency by GED scores that meet standard core requirements set by the Ohio Department of Education. Applicants must have earned grades of C or higher in high school or college biology, chemistry, and algebra courses. These courses must have been taken within seven years of application. COMPASS® scores must meet program requirements. Applicants must be Ohio state-tested nurse aides or LPN's. A cumulative grade point average of 2.75 and a specific grade point average of at least 2.5 for the first two terms of the curriculum are required for entry into the clinical courses.

Support courses must be taken in the sequence listed in the program curriculum outline unless they have been taken previous to the term required. Students must meet all requirements of the program, earn a minimum grade of C or pass in all curriculum courses, attain satisfactory clinical evaluation, and maintain a minimum overall grade point average of 2.0 to complete the program. During the final term of the curriculum, students must pass a nationally standardized exit exam in order to pass the final theory course.

Current certification in CPR for health care providers is required for admission into all clinical nursing courses. Students must provide a recent physical exam with up-to-date immunizations, including Hepatitis B, prior to commencing course work. Students must obtain a two-step TB skin test to enter the program and obtain an annual repeat to remain in the program.

Prospective students are advised that when applying for the state licensure examination they are required to answer a series of questions related to criminal convictions, reasons for dismissal from work positions, and mental health status. A positive response to any of these questions can result in disqualification as a candidate for licensure. Refer to Ohio Revised Code 4723.28 for clarification. The licensure application may be viewed on the Ohio Board of Nursing website at www.nursing.ohio.gov.

Students admitted to the program who have been convicted of felonies and/or misdemeanors are required to contact the program director to discuss their situation before entering the first nursing course. Background checks will be completed by all incoming clinical students per Health and Public Safety Division policy. Students who are convicted of possession and/or distribution of controlled substances, or have positive drug screens for non-prescription controlled substances while enrolled in the program are automatically dismissed.

A special track for Licensed Practical Nurses (NURP) with recent experience in hospitals or skilled long-term facilities exists, and those interested in this track should request information through the pre-technology nursing advisor or NURP program chair.

Students who wish to transfer nursing credit from another nursing program to Cincinnati State must contact the program coordinator for specific information after being admitted to the College and program. Students may transfer a maximum of 26 quarter credits of clinical courses. Restrictions may be placed on nursing credit transfer for students who failed a nursing course or courses

in another program. Because nursing is a dynamic profession, the program reserves the right to change the curriculum as necessary.

Nursing

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
XXX	XXXX	Non-Technical Elective	2	0	2
			14	2	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
BIO	4009	General Microbiology	3	3	4
BIO	4015	Anatomy and Physiology 2	3	2	4
			12	5	14
THIRD TERM					
PSY	1508	Child Development	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
NUR	4931	Nursing Skills Laboratory 1	0	3	1
NUR	4933	Introduction to Nursing	4	3	5
			10	8	13
FOURTH TERM					
BIO	4018	Pharmacology	3	0	3
NUR	4941	Nursing Skills Laboratory 2	0	3	1
NUR	4943	Common Health Problems in Nursing	6	6	8
NUR	4946	Health Assessment in Nursing 1	1	3	2
			10	12	14
FIFTH TERM					
NUR	49XX	Nursing Elective	1	16	2
			1	16	2
SIXTH TERM					
NUR	4953	Mental Health Nursing	3	6	5
NUR	4954	Gerontological Nursing	3	6	5
NUR	4956	Health Assessment in Nursing 2	1	3	2
			7	15	12
SEVENTH TERM					
COMM	102X	Communication Elective	3	0	3
NUR	4963	Perinatal Nursing and Women's Health Issues	3	6	5
NUR	4964	Nursing Care of Children	3	6	5
			9	12	13
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
NUR	4973	Adult Nursing	6	12	10
			9	12	13
NINTH TERM					
NUR	4981	Transitional Clinical Experience	0	18	6
NUR	4982	Management of Client Care	6	0	6
			6	18	12
					108

Nontechnical Elective: Choose one of the following: DT 1202, HFT 4818, MCH 4001, MCH 4002, MCH 4808, MCH 4816, MCH 4819, MCH 4870, PHI 1620, PHI 1625, PHI 1630, SPN 1090
Nursing Elective: NUR 4937, NUR 4993, or NUR 9372
Communication Elective: COMM 1020, COMM 1023, COMM 1024, or COMM 1027
English Elective: ENG 1010, ENG 1003
Students must complete all courses within a level with minimum grades of C or Pass before progressing to the next curriculum level.

Nursing - LPN to RN

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
BIO	4014	Anatomy and Physiology 1	3	2	4
			13	4	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
BIO	4009	General Microbiology	3	3	4
BIO	4015	Anatomy and Physiology 2	3	2	4
			12	5	14
THIRD TERM					
BIO	4016	Anatomy and Physiology 3	3	2	4
NUR	4918	Ohio Nursing Articulation Model Transitions Course	3	4.5	4.5
			6	6.5	8.5
FOURTH TERM					
NUR	4922	Role Transition in Nursing 1	4.5	4.5	6
			4.5	4.5	6
FIFTH TERM					
PSY	1508	Child Development	3	0	3
NUR	4923	Mental Health Nursing (NURP)	2.5	6	4.5
NUR	4928	Gerontological Nursing	2	0	2
			7.5	6	9.5
SIXTH TERM					
NUR	4924	Nursing of Children (NURP)	2.5	6	4.5
NUR	4925	Perinatal Nursing and Health Issues of Women (NURP)	2.5	6	4.5
			5	12	9
SEVENTH TERM					
COMM	102X	Communication Elective	3	0	3
ENG	10XX	English Elective	3	0	3
			6	0	6
EIGHTH TERM					
NUR	4926	Adult Nursing (NURP)	6	7.5	8.5
			6	7.5	8.5
NINTH TERM					
NUR	4927	Role Transition in Nursing 2	5.5	12	9.5
			5.5	12	9.5
					86

Communication Elective: COMM 1020, COMM 1023, COMM 1024, COMM 1027
English Elective: ENG 1010, ENG 1003
Upon successful completion of NUR 4926 with a grade of C or higher, students must apply for 19 credit hours of advanced standing for nursing and 3 credit hours for BIO 4018.
Required Course Credits: 86
Advanced Standing Credits: 22
Total Credits Required: 108

All courses within a level must be completed with a minimum grade of C or Pass before progressing to the next curriculum level.

Practical Nursing Certificate (PNC)

Program Chair/Director: Kathy Nicely, RN, MSN

The Cincinnati State Great Oaks School of Practical Nursing prepares graduate practical nurses who are eligible to take the national standardized nursing examination (NCLEX-PN) and upon passing, work as licensed practical nurses.

The program has full approval by the Ohio Board of Nursing and is accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, phone: (404) 975-5000. Graduates share in the responsibility of nursing care to individuals and groups in a diversity of health care settings within the guidelines of the Nurse Practice Act.

All classes including general education and practical nursing courses for the Cincinnati State Great Oaks School of Practical Nursing are offered at the following Great Oaks Campuses:

- Scarlet Oaks – Sharonville, OH
  Day and evening classes offered.
- Diamond Oaks – Dent, OH
  Evening classes offered.
- Laurel Oaks – Wilmington, OH
  Day classes offered.
- Live Oaks – Milford, OH
  Evening classes offered.

The day program takes five terms to complete and the evening program takes seven terms to complete.

Applicants must be graduates of an accredited high school or give evidence of high school equivalency by GED scores that meet standard core requirements set by the Ohio State Department of Education. COMPASS® scores must meet program requirements which include demonstrating keyboarding skill level of 20 words per minute. Any prospective student unable to demonstrate keyboarding at 20 wpm is required to take OT 3007 Introduction to Keyboarding or its equivalent which must be taken prior to MCH 3001 Informatics in Health Care.

Support courses must be taken in the sequence listed in the program curriculum outline unless they have been taken previous to the term required. Applicants who do not have a grade of C or higher in high school or college biology must take BIO 4071 Concepts of Biology 1 as a prerequisite to BIO 4073 Concepts of Biology 3. BIO 4071 is offered during the first term of the PNC program. Students must meet all requirements of the program, earn a minimum grade of C or pass in all curriculum courses, attain satisfactory clinical evaluation, and maintain a minimum overall grade point average of 2.0 to complete the program. During the final term of the curriculum, students must pass a nationally standardized exit exam in order to pass the final theory course.

A criminal background check including both Bureau of Criminal Identification and Investigation and Federal Bureau of Investigation must be conducted within six months of entry into the program. A criminal record may prevent applicants from admission into the program; applicants convicted of a felony will not be admitted to the program. Prospective students are advised that when applying for the state licensure examination they will be required to answer a series of questions related to criminal convictions, reasons for dismissal from work positions, and mental health status. A positive response to any of these questions can result in disqualification as a candidate for licensure. Refer to Ohio Revised Code 4723.28 for clarification. The licensure application may be viewed on the Ohio Board of Nursing website at www.nursing.ohio.gov. Students convicted of possession and/or distribution of controlled substances, or have positive drug screens for controlled substances not prescribed while enrolled in the program are automatically dismissed.

Current certification in CPR for health care providers or professional rescuer is required for admission into the PNC program. Students must submit the required health form with up-to-date immunizations, including Hepatitis B, a two-step, or annual PPD prior to being designated in a class. Immunizations, PPD, and CPR must be updated throughout the program. Applicants must be active on a state Nurse Aide Registry.

Nursing courses from another nursing program are typically not accepted for transfer into Cincinnati State. Students who wish to discuss the possibility of transferring nursing credit from another nursing program to Cincinnati State must contact the program chair for specific information after being admitted to the College and the program, but prior to being placed into a class. Restrictions may be placed on nursing credit transfer for students who failed a nursing course or courses in another program. Because nursing is a dynamic profession, the program reserves the right to change the curriculum as necessary.

Practical Nursing Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
COMM	1023	Interpersonal Communication	3	0	3
PSY	1515	Lifespan Development	3	0	3
PN	4933	Introduction to Practical Nursing	1	0	1
PN	4934	Nursing Pharmacology	3	0	3
FYE	9001	College Survival Skills	1	0	1
			11	0	11
SECOND TERM					
BIO	4073	Concepts of Biology 3	3	2	4
PN	4943	Foundations of Practical Nursing 1	7	0	7
PN	4944	Foundations of Practical Nursing 1 - Lab/Clinical	0	6	2
			10	8	13
THIRD TERM					
MCH	4002	Informatics in Health Care	1	2	2
PN	4953	Foundations of Practical Nursing 2	8	0	8
PN	4954	Foundations of Practical Nursing 2 - Lab/Clinical	0	9	3
			9	11	13
FOURTH TERM					
PN	4963	Alterations in Health 1	5	0	5
PN	4964	Alterations in Health 1-Clinical	0	6	2
PN	4965	Alterations in Health 2	5	0	5
PN	4966	Alterations in Health 2-Clinical	0	6	2
			10	12	14
FIFTH TERM					
PN	4971	Alterations in Health 3	10.5	0	10.5
PN	4972	Alterations in Health 3-Clinical	0	4.5	1.5
PN	4973	Professional Issues in Practical Nursing	1	0	1
PN	4974	Role Transition in Practical Nursing	0	12	2
			11.5	16.5	15
					66

Occupational Therapy Assistant Technology (OTA)

Program Chair: Claudia Miller, OTD, OTR/L

Occupational therapy is the art and science of directing the human response with a focus on using selected client-centered occupations to promote and maintain health, prevent disability, assess behavior, and treat or train patients with physical or psychological dysfunction.

Graduates of the Occupational Therapy Assistant Technology program are technically qualified members of the health team who function under the supervision or consultation of a registered occupational therapist. Assistants accept clinical responsibilities in: hospitals, nursing homes, schools, rehabilitation centers, or those organizations directed to maintain health and socialization. Graduates demonstrate entry-level competency in analyzing activities and their application to client needs; occupational therapy concepts and skills (daily living skills, group activities, evidence based interventions, and adaptive equipment); direction of activity programs; department operation management; data collection; self understanding and the realization of the effect that one's behavior has on the patient/client and others; upholding the standards of the profession; identifying the need for continuing professional education and growth; and relating occupational therapy to the total health care system.

The mission of this program is to prepare graduates as competent, entry-level generalists qualified to practice in the field of OT, to meet the community workforce needs, to provide opportunities for experiential and cooperative education with exposure to non-traditional and emerging areas of practice, to educate the community, and to function within the standards of the College, the AOTA, and ACOTE.

The Occupational Therapy Assistant program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association

(AOTA) located at 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220, phone: (301) 652-AOTA.

Graduates earn an Associate of Applied Science degree and are eligible to sit for the National Certification Examination for the Occupational Therapy Assistant administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, graduates are Certified Occupational Therapy Assistants (COTA). Current pass rates are available to view on the College's website.

Most states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT examination. A felony conviction may affect a graduate's ability to sit for the NBCOT certification examination, and background checks are now required in the state of Ohio to attain state licensure.

All OTA students must complete Level II fieldwork within 20 months following completion of academic preparation.

Occupational Therapy Assistant Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
BIO	4014	Anatomy and Physiology 1	3	2	4
OTA	4600	Introduction to Occupational Therapy	2	3	3
OTA	4601	Fundamentals of Crafts	0	2	1
OTA	4637	Occupational Therapy Terminology	1	0	1
			12	7	15
SECOND TERM					
PSY	1506	Introduction to Psychology 2	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
OTA	4610	Theory of Occupational Therapy	5	0	5
OTA	4620	Techniques of Occupational Therapy	0	4	2
			11	6	14
THIRD TERM					
PSY	1515	Lifespan Development	3	0	3
BIO	4016	Anatomy and Physiology 3	3	2	4
OTA	4612	Occupational Therapy Concepts and Skills - Infants and Children	3	0	3
OTA	4622	Therapeutic Media-Infants and Children	0	4	2
OTA	4652	Occupational Therapy Assisting Fieldwork 1 (Level I)	0	9	2
			9	15	14
FOURTH TERM					
COMM	10XX	Communication Elective	3	0	3
PSY	1507	Abnormal Psychology	3	0	3
OTA	4611	Occupational Therapy Concepts and Skills - Psychosocial	3	0	3
OTA	4621	Therapeutic Media-Infants and Children	0	4	2
OTA	4651	Occupational Therapy Assisting Fieldwork 2 (Level I)	0	9	2
			9	13	13
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
MCH	4001	Intro to the Health Care System	2	0	2
BIO	4074	Human Disease	3	0	3
			11	0	11
SIXTH TERM					
OTA	4613	Occupational Therapy Concepts and Skills - Physical Disabilities	3	0	3
OTA	4623	Clinical Competencies for Occupational Therapy - Physical Disabilities	0	6	3
OTA	4633	Kinesiology for Occupational Therapy	2	2	3
OTA	4636	Orthotics & Physical Agent Modalities	0	2	1
			5	10	10
SEVENTH TERM					
CULT	1602	Issues in Human Diversity	3	0	3
OTA	4614	Occupational Therapy Concepts and Skills - Gerontology	3	0	3
OTA	4624	Therapeutic Media-Gerontology	0	4	2
OT	4638	Home Modification & Assistive Technology	1	2	2
OTA	4653	Occupational Therapy Assisting Fieldwork 3 (Level I)	0	9	2
			7	15	12
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
OTA	4625	Survey of Therapeutic Media for Occupational Therapy	0	6	3
OTA	4631	Occupational Therapy Fundamentals Practice	3	0	3
			6	6	9
NINTH TERM					
OTA	4660	Occupational Therapy Assisting Fieldwork 4 (Level II)	0	40	6
			0	40	6
TENTH TERM					
OTA	4661	Occupational Therapy Assisting Fieldwork 5 (Level II)	0	40	6
			0	40	6
					110

Communication Elective: any COMM 10XX
English Elective: ENG 1010, ENG 1003

Public Safety Technology (PST)

Program Director: Robert Baylor

The Public Safety Technology program provides a comprehensive review of issues related to homeland security, emergency management, security and risk assessments. This program prepares students for entry-level or advanced management positions in fields ranging from homeland security to public safety. The curriculum includes courses in basic law, regulations and compliance, emergency management, domestic and international terrorism, homeland security management, risk management, and geographic information systems (GIS).

The program offers a certificate in emergency management or homeland security. These certificates can either stand alone or can apply to the Associate of Applied Science degree. Students interested in the certificates should contact the Health and Public Safety Division for further information.

The Public Safety Technology program offers students the ability to concentrate in those areas specific to their industry such as construction safety, environmental safety, healthcare safety, emergency management, homeland security, or public safety. Students can focus their studies a wide range of technical electives. The program also includes cooperative education employment in a public or private safety or security venue.

In addition, the program has articulation agreements with the Franklin University, Xavier University, and the Union Institute. Safety and Security Management graduates may apply their degrees towards a bachelor's degree at any of those universities.

Public Safety Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
CULT	1602	Issues in Human Diversity	3	0	3
ENG	1001	English Composition 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3

SOC	1521	Introduction to Sociology 1	3	0	3
SSM	4001	Professionalism in Safety and Security Management	3	0	3
			18	0	18
SECOND TERM					
EMS	4760	Emergency Medical Technician Basic Training 1	3	5	5
ENG	1002	English Composition 2	3	0	3
MAT	1122	Business Mathematics 2	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
SOC	1523	Introduction to Sociology 2	3	0	3
			15	5	17
THIRD TERM					
EMS	4761	Emergency Medical Technician Basic Training 2	3	5	5
ENG	1003	English Composition 3	3	0	3
MAT	1123	Business Mathematics 3	3	0	3
SSM	4002	Legal Issues in Safety and Security Management	4	0	4
			13	5	15
FOURTH TERM					
CRJ	1250	Introduction to Criminal Justice	3	0	3
SSM	4003	Introduction to Homeland Security Management	3	0	3
SSM	4004	Principles of Safety Management	4	0	4
SSM	4005	Emergency Preparation and Response	4	0	4
			14	0	14
FIFTH TERM					
CRJ	1256	Criminal Investigation Skills	3	0	3
MGT	2965	Principles of Management 1	3	0	3
SPN	1090	Spanish for the Professions	3	0	3
SSM	XXXX	SSM Elective	3	0	3
			12	0	12
SIXTH TERM					
COMM	1020	Public Speaking	3	0	3
PHI	1625	Ethics	3	0	3
SSM	92XX	SSM Experiential Learning Elective	0	0	1
SSM	XXXX	SSM Elective	3	0	3
SSM	XXXX	SSM Elective	3	0	3
			12	0	13
SEVENTH TERM					
SSM	92XX	SSM Experiential Learning Elective	0	0	1
SSM	XXXX	SSM Elective	3	0	3
SSM	XXXX	SSM Elective	3	0	3
			6	0	7
EIGHTH TERM					
SSM	92XX	SSM Experiential Learning Elective	0	0	1
SSM	XXXX	SSM Elective	3	0	3
XXX	XXXX	Accounting/Finance Elective	3	0	3
			6	0	7
					103

SSM Elective: SSM 4010, SSM 4011, SSM 4120, SSM 4123, SSM 4125, SSM 4126, SSM 4130, SSM 4201, SSM 4202, SSM 4204, SSM 4301, SSM 4303, SSM 4304

Accounting/Finance Elective: ACC 2924, MGT 2963

SSM Experiential Learning Elective: SSM 9200, SSM 9201, SSM 9210, SSM 9211. Consult with program chair prior to registering for electives.

Respiratory Care Technology (RC)

Program Chair: Debra Lierl, RRT
Director of Clinical Education: Tom Stormer, RRT
Medical Director: Christopher Schmitt, MD
Faculty: Mike Chaney, RRT

Respiratory Therapists are the health care specialists who evaluate, treat, and care for patients with breathing disorders. Respiratory Therapists interact with a diverse group of patients ranging from newborn and pediatrics to adults and the elderly. They work in various health care settings including hospitals, home care, rehab, diagnostic testing, and sleep labs. The Respiratory Care Technology program at Cincinnati State is an Associate of Applied Science degree program that prepares students to administer all routine respiratory care procedures, continuous mechanical ventilation, hemodynamic monitoring, and other specialized diagnostic and therapeutic procedures. Students also receive training in non-traditional areas such as home care and pulmonary rehabilitation.

The program is 22 months in duration and includes paid cooperative education and unpaid clinical experiences. Graduates are prepared to work in acute care, long-term care, and home care settings. Students are eligible to obtain a limited permit to practice as a respiratory therapist after successful completion of the first clinical course (RT 4711).

The program is fully accredited by the Commission on Accreditation for Respiratory Care (CoARC) 1248 Harwood Road, Bedford, Texas, 76021, phone: (817) 282-2835, www.coarc.com.

Program graduates may apply for the certification examination and registry examination administered by the National Board for Respiratory Care (NBRC). Candidates who pass these exams are recognized nationally as Certified Respiratory Therapists (CRT) and as Registered Respiratory Therapists (RRT). Eligibility for an Ohio permit as a Respiratory Therapist requires CRT credentialing.

Respiratory Care Technology

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
MAT	11XX	Math Elective	4	0	4
PHY	2244	Physics for Respiratory Care Technology	3	2	4
BIO	4014	Anatomy and Physiology 1	3	2	4
RT	4700	Health Care Edge-Respiratory Care	1	3	2
			11	7	14
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
RT	4701	Respiratory Care Science 1	3	2	4
RT	4720	Cardiopulmonary Anatomy & Physiology	4	2	5
			13	6	16
THIRD TERM					
BIO	4009	General Microbiology	3	3	4
BIO	4016	Anatomy and Physiology 3	3	2	4
RT	4702	Respiratory Care Science 2	3	3	4
RT	4711	Respiratory Care Clinical Practice 1	0	8	1
			9	16	13
FOURTH TERM					
ENG	1002	English Composition 2	3	0	3
BIO	4018	Pharmacology	3	0	3
RT	4703	Respiratory Care Science 3	3	2	4
RT	4712	Respiratory Care Clinical Practice 2	0	9	1
RT	4718	Pulmonary Diseases 1	3	3	4
			12	14	15
FIFTH TERM					
RT	4704	Respiratory Care Science 4	4	3	5
RT	4713	Respiratory Care Clinical Practice 3	0	17	3
RT	4719	Pulmonary Diseases 2	3	0	3
			7	20	11
SIXTH TERM					
RT	4705	Respiratory Care Science 5	2	2	3
RT	4714	Respiratory Care Clinical Practice 4	0	22	4
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			5	24	10
SEVENTH TERM					
ENG	10XX	English Elective	3	0	3
BIO	4020	Fundamentals of Pathophysiology	5	0	5
RT	4706	Respiratory Care Science 6	5	0	5
RT	93XX	Experiential Elective	1	20	1
			14	20	14
EIGHTH TERM					
RT	4707	Respiratory Care Science 7	3	0	3
RT	4715	Respiratory Care Clinical Practice 5	0	18	3

XXX	XXXX	Humanities/Social Science Elective	3	0	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			9	18	12
NINTH TERM					
COMM	10XX	Communication Elective	3	0	3
RT	4716	Respiratory Care Clinical Practice 6	0	20	3
RT	4723	Respiratory Care Seminar	2	2	3
			5	22	9
					114

Humanities/Social Science Elective (Must choose coursework from at least two of the different departments listed below)
ECO, GEO, HST, LBR, CULT, ART, MUS, LIT, PHI, POL, PSY or SOC
Math Elective: MAT 1105, MAT 1151
English Elective: ENG 1003, ENG 1010
Communication Elective: COMM 1020, COMM 1023
Experiential Elective: RT 9376, RT 9386

Surgical Technology (ST)

Program Chair: Wanda Dantzler, RN, CNOR, CRCST
Surgical Technology is an Associate of Applied Science degree program that prepares practitioners specifically for the operating room scrub role. Employment opportunities include hospital operating room departments, obstetrical departments, surgical supply/processing departments, outpatient surgery centers, surgeon office practices, and surgical product manufacturers. Most of the area hospitals and some ambulatory surgery centers are affiliated with the program.

During operative procedures, surgical technologists function as an integral part of the surgical team and work directly with the surgeon and registered nurse. Their responsibilities include preparing operative equipment, supplies, and instrumentation during operative procedures, and other intra-operative patient care activities.

Theory and practice are integrated through the use of simulated laboratory experiences and hospital operating room experiences. Students also take supportive coursework in basic sciences, communication skills, and social sciences. Students receive no monetary compensation for clinical coursework.

The program is accredited by The Commission on Accreditation of Allied Health Education Programs (www.caahep.org) in collaboration with the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC-STSA), 6 West Dry Creek Circle, Suite 110, Littleton, CO, 80120-8031, phone: (303) 694-9262, www.arcst.org.

Upon satisfactory completion of the program curriculum, students are eligible to take the Surgical Technologist National Certifying Examination administered by the national Board of Surgical Technology and Surgical Assisting (NBSTSA) for designation as a Certified Surgical Technologist (CST). A CST may practice in all 50 states.

Surgical Technology

Program prerequisites: BIO 4014, MAT 1105, MCH 4001, PHY 2245 and ST 4500 (minimum grade C for all); GPA 2.5 or higher.
All degree-seeking students must complete an FYE course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
BIO	4009	General Microbiology	3	3	4
ST	4527	Fundamentals of Surgical Tech 1	5	0	5
MCH	4806	Medical Terminology 1	3	0	3
MCH	4882	Law and Ethics for Health Care	3	0	3
			14	3	15
SECOND TERM					
ENG	1001	English Composition 1	3	0	3
BIO	4015	Anatomy and Physiology 2	3	2	4
ST	4528	Fundamentals of Surgical Technology	27	0	7
ST	4541	ST Surgery Lab	0	3	1
			13	5	15
THIRD TERM					
BIO	4016	Anatomy and Physiology 3	3	2	4
ST	4529	General Surgery 1	7	0	7
ST	4542	ST Clinical and Lab Integration 1	1	6	3
			11	8	14
FOURTH TERM					
BIO	4018	Pharmacology	3	0	3
ST	4530	General Surgery 2	6	0	6
ST	4543	ST Clinical and Lab Integration 2	0	7	3
			9	7	12
FIFTH TERM					
ENG	1002	English Composition 2	3	0	3
MCH	4002	Informatics in Health Care	1	2	2
ST	4533	Surgical Specialties 1	5	0	5
ST	4544	Introduction to Clinical Practice	0	6	2
			9	8	12
SIXTH TERM					
COMM	1023	Interpersonal Communication	3	0	3
ST	4534	Surgical Specialties 2	5	0	5
ST	4551	ST Clinical Practice 1	0	30	5
			8	30	13
SEVENTH TERM					
ST	4535	Surgical Specialties 3	5	0	5
ST	4552	ST Clinical Practice 2	0	25	5
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			8	25	13
EIGHTH TERM					
ENG	10XX	English Elective	3	0	3
ST	4553	ST Clinical Practice 3	0	25	5
XXX	XXXX	Humanities/Social Science Elective	3	0	3
XXX	XXXX	Humanities/Social Science Elective	3	0	3
			9	25	14
					108

Humanities/Social Science Elective (Must choose coursework from at least two different departments): ART, CULT, ECO, GEO, HST, LBR, LIT, MUS, PHI, POL, PSY, or SOC course.
English Elective: ENG 1003, ENG 1010

Surgical Technology First Assistant (STFA)

Program Chair: Wanda Dantzler, RN, CNOR, CRCST
First assistants/surgical assistants provide aid in exposure, hemostasis, closure, and other intraoperative technical functions that help the surgeon carry out a safe operation with optimal results for the patient. In addition to intraoperative duties, surgical assistants also perform preoperative and postoperative duties to better facilitate proper patient care. The first assistant/surgical assistant performs these functions during the operation under the direction and supervision of the surgeon and in accordance with hospital policy and appropriate laws and regulations. The role varies considerably with the surgical procedure, specialty area, and type of facility.

This program is a one year certificate encompassing the basic aspects of first assisting. Most of the courses are delivered via the internet using the Blackboard Learning System. Some residency requirements are needed for courses with both an internet theory component and campus simulated laboratory experiences. The clinical component is designed as a self-directed, individualized, supervised externship. Students are given the opportunity to develop and demonstrate his or her proficiency in manual and behavioral skills in the surgical setting of a student-selected clinical site under the preceptorship of a surgeon or a facility designated preceptor. A minimum of 135 cases in multiple specialties is required. Clinical logs, competency based assessments, and evaluation by surgeon/preceptor are tools used to determine successful completion of the clinical component.

Students admitted to the STFA program must have a minimum of an associate's degree from a regionally accredited college or uni-

versity. Curriculum must include college-level basic sciences within the last five years, including microbiology, pathophysiology, pharmacology, anatomy and physiology, and medical terminology. Prospective students must be certified as a Surgical Technologist (CST), must have three years full-time scrub and/or assisting experience, within the last seven years. Proof of current CPR card for healthcare providers, liability insurance, and updated immunizations are also required. Students must submit a completed Clinical Acceptance Preceptorship form. Student must also demonstrate computer literacy.

This new program is currently seeking accreditation.

Surgical Technology First Assistant Certificate

Program Prerequisites: Students admitted to the STFA program must have a minimum of an associate's degree from a regionally accredited college or university. Curriculum must include college-level basic sciences within the last seven years, including microbiology, pathophysiology, pharmacology, anatomy and physiology, and medical terminology. Prospective students must also be certified as a Surgical Technologist, must have three years full-time scrub and/or assisting experience within the last five years.

		Hours Per Week Class	Lab	Credit Hours
FIRST TERM				
STFA 4570	Perioperative Biosciences	5	0	5
STFA 4571	Principles of First Assisting	2	4	4
		7	4	9
SECOND TERM				
STFA 4572	Advanced Surgical Specialties 1	5	0	5
STFA 4573	First Assisting Clinical 1	0	8	1
		5	8	6
THIRD TERM				
STFA 4574	Advanced Surgical Specialties 2	5	0	5
STFA 4575	First Assisting Clinical 2	0	8	1
		5	8	6
FOURTH TERM				
STFA 4576	Advanced Surgical Specialties 3	5	0	5
STFA 4577	First Assisting Clinical 3	0	8	1
		5	8	6
FIFTH TERM				
SSM 1000	Disaster Preparedness for Health and Public Safety Workers	2	0	2
STFA 4578	Advanced Surgical Specialties 4	5	0	5
STFA 4579	First Assisting Clinical 4	0	8	1
		7	8	8
				35

Workforce Development Center Certificates

The following Health and Public Safety Division certificate programs are offered in collaboration with Cincinnati State's Workforce Development Center. Classes are scheduled once a sufficient number of students indicate an interest in enrolling. Students enrolled in these courses earn regular college credits. For further information regarding the Workforce Development Center, please refer to page 150 of this catalog or visit the Workforce Development Center's website at www.workforcecincinnati.com

Nurse Aide Training Certificate

Nurse Aide Training Certificate is also available.

Nurse Aide Train-the-Trainer Program

Program Director: Laurel Alfieri

This state-approved course prepares nurses for teaching either in the classroom or in clinically supervised parts of an approved training and competency evaluation program for long-term care aides.

Nurse Aide Train-the-Trainer

		Hours Per Week Class	Lab	Credit Hours
One Term Certificate				
MCH 4810	Nurse Aide Training	4	6	6

Patient Care Assistant Certificate

Program Director: Laurel Alfieri, RN

The patient care assistant is an unlicensed assistant who supports the professional nurse in providing basic patient care in an acute care setting. Patient care assistants are trained to work in hospitals in general medical/surgical units. The program builds upon the content covered in the Nurse Aide Training and Competency Evaluation Program. It addresses role definition, clarification, and patient focus; communication (including medical terminology); overview of basic anatomy and physiology concepts and associated common normal/abnormal observations; overview of nutrition and diet therapy; pre- and post- operative care; functional health patterns related to hospitalized patients; and associated patient care skills.

Prospective students must have State-Tested Nurse Aide certification and a high school diploma or GED equivalent.

Patient Care Assistant Certificate

		Hours Per Week Class	Lab	Credit Hours
One Term Certificate				
MCH 4812	Intro to Patient Care Assistant Role	4	0	4

Restorative Aide Certificate

Program Director: Laurel Alfieri, RN

This course provides an overview of the restorative aide's role and responsibilities. Students learn lifting, moving, and ambulation procedures; care of individuals with musculoskeletal, neurological, and integumentary conditions; restorative approaches to meeting nutrition, hydration, activities of daily living, and personal care needs; and care documentation. This class is appropriate for nurse aides and licensed nurses new to restorative programs in long term care.

Prospective students must have State-Tested Nurse Aide or have Nursing Licensure.

Restorative Aide Certificate

		Hours Per Week Class	Lab	Credit Hours
One Term Certificate				
MCH 4813	Restorative Aide Training	1	2	2

Humanities Division

Division Phone Number: (513) 569-1700

The Humanities Division recognizes that each student has a unique combination of attitudes, beliefs, values, and experiences. The Humanities Division's courses enable students to understand the forces that shape them, especially in the psychological, social, and economic areas, and provide tools that assist students either in controlling or adapting to these forces.

Foremost among these tools is effective communication, both oral and written. Therefore, the division offers a number of courses that enhance communication skills by developing critical thinking techniques and the ability to present information in a clear, organized manner. To set the stage for success in the college experience, degree-seeking students are required to complete a college orientation course, either FYE 9001, College Survival Skills, or FYE 9002, College Success Strategies, or FYE 9003, the Community College Experience, within the first 18 credit hours taken at Cincinnati State.

The Humanities Division offers Associate of Arts, Associate of Applied Science, and Associate of Technical Study degrees. The division also offers several certificate programs.

Entrance Competencies

In order to ensure a high degree of success in academic studies in Humanities, entering students must meet established academic levels in mathematics, written communication skills, and reading comprehension. To aid in determining these levels, entering students are required to take COMPASS®, the college admissions/placement test. If testing and previous academic background indicate that a student has not reached the necessary preparatory level, a divisional advisor will assist in preparing a program of classes to help the student reach those levels. Preparatory classes are available on a year-round basis.

Cooperative Education

The Humanities Division shares the College's commitment to cooperative education as an integral part of the curriculum. Cooperative education allows students to apply concepts learned in the classroom with practical, hands-on experience in full-time or part-time on-site work environments. In some cases, degree-seeking students with prior work experience related to their post-baccalaureate career goals may be eligible to receive credit through the standard College procedures for granting advanced standing credit. The program chair and cooperative education coordinator must approve all substitutions in advance.

For eligibility requirements, co-op registration policies, and other issues related to cooperative education, please refer to the "Cooperative Education" section of the catalog on page 29.

The Writing Center

The Writing Center provides full-service tutoring in writing to Cincinnati State students. Tutors are available by appointment, on a walk-in basis, or online to help provide guidance to students in all facets of the writing process.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. Ohio's transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of the College catalog.

The Associate of Arts degree contains all of the required courses for the transfer module, and the Associate of Applied Science degrees contain many of the required courses. Students earning Associate of Applied Science degrees may schedule additional courses needed to complete the transfer module at their convenience. Students who transfer to an Ohio public university for baccalaureate degrees will find that an Associate of Arts degree or an Associate of Applied Science degree combined with a transfer module completion leads to preferential consideration at the receiving institution.

Associate of Arts (AARTS)

Program Chair: Joyce Rimlinger
Co-op Coordinator: Jayne Martin Dressing
Advisor: Julie McLaughlin

The Associate of Arts degree program prepares students to transfer to a four-year college or university to complete a bachelor's degree in such fields as communications, psychology, criminal justice, education, pre-law, pre-mortuary sciences, and social work. Students who earn this degree receive preferential consideration for admission to Ohio's public universities.

For a complete listing of degree requirements, see page 72.

Early Childhood Care and Education (ECE)

Program Chair: Crystal Bossard

The Associate of Applied Science in Early Childhood Care and Education (ECE) prepares graduates to work in a variety of child care settings. Graduates of this program are eligible to apply to the Ohio Department of Education for Pre-Kindergarten Teacher Certification.

The ECE program has been designed, with the assistance of experienced faculty and the program's advisory committee, to meet the standards of the National Association for the Education of Young Children and the Council for Early Childhood Professional Recognition as well as those formulated by the Ohio Department of Education for Pre-Kindergarten Teacher Certification.

Early Childhood Care and Education

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
OT	3058	Microsoft Word for Windows	2	3	3
ECE	4359	Foundations of Early Childhood Care and Education	3	0	3
ECE	4368	Early Childhood Assessment and Observation Techniques	2	0	2
ECE	4371	Communicable Diseases of Early Childhood	1	0	1
ECE	4372	Child Abuse Recognition and Prevention	1	0	1
EMS	4733	CPR - Pediatric Basic Life Support	0	1	0.5
EMS	4734	Heartsaver AED-Adult	0	1	0.5
			12	5	14
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
ECE	4360	Prin of Early Childhood Education	3	0	3
ECE	4361	Early Childhood 1 - Infant/Toddler	3	0	3
ECE	4362	Early Childhood Practicum 1 - Infant/Toddler	1	7	2
ECE	4374	Language Development	3	0	3
			16	7	17
THIRD TERM					
ENG	1010	Technical Writing 1	3	0	3
MAT	1121	Business Mathematics 1	3	0	3
PSY	1506	Introduction to Psychology 2	3	0	3
ECE	4363	Early Childhood 2 - Preschool	3	0	3
ECE	4364	Early Childhood Practicum 2 - Preschool	1	7	2
ECE	4369	Parents and Families in Early Childhood Education	2	0	2
			15	7	16
FOURTH TERM					
PSY	1508	Child Development	3	0	3
ECE	4365	Early Childhood 3 - School Age	3	0	3
ECE	4366	Early Childhood Practicum 3 - School Age	1	7	2
ECE	4367	Art, Music, Play for Early Childhood Programs	3	0	3
ECE	4370	Nutrition and Health for Early Childhood Programs	3	0	3
XXX	XXXX	Art or Music Elective	3	0	3
			16	7	17

FIFTH TERM					
COMM	1020	Public Speaking	3	0	3
BIO	4071	Concepts of Biology 1	3	2	4
ECE	4375	Diversity Education for Early Childhood Programs	3	0	3
ECE	4377	Math and Science for Early Childhood Programs	3	0	3
ECE	4381	Early Literacy 1	3	0	3
			15	2	16
SIXTH TERM					
ECE	4376	Exceptional Children	3	0	3
ECE	4382	Early Literacy 2	3	0	3
ECE	4384	Curriculum Design	3	0	3
ECE	4386	Professional, Legal, and Ethical Issues in Childhood Education	3	0	3
XXX	XXXX	Humanities/Social Science	3	0	3
			15	0	15
SEVENTH TERM					
ECE	4378	Administration of Childhood Programs	4	0	4
ECE	4383	Early Literacy 3	3	0	3
ECE	4387	Special Topics in Early Childhood Care and Education	0	0	0
TC	5034	Planning and Developing Proposals	3	2	4
			10	2	11
EIGHTH TERM					
ECE	9905	Student Teaching - Early Childhood Care and Education	1	20	2
			1	20	2
					108

Art Elective: ART 1660, ART 1662, ART 1663, ART 1664
Music Elective: MUS 1665, MUS 1666, MUS 1667
Humanities/Social Sciences Elective: LIT 1040, LIT 1054, LIT 1057, SOC 1526, GEO 1551, HST 1561, HST 1562, HST 1563, HST 1568, HST 1569, HST 1570, HST 1576, HST 1577, HST 1578, PHI 1630, THE 1670, THE 1671

Early Childhood Care and Education Certificate (ECEC)

Program Chair: Crystal Bossard

The Early Childhood Care and Education certificate program prepares students for entry-level positions in a variety of child care settings. Graduates are prepared to assist parents in meeting the physical, emotional, and maturational needs of children from infancy to kindergarten.

Entrance requirements include: a background check, ability to perform and assist children in daily activities, physical examination, and up-to-date immunizations.

Students who complete this certificate are eligible to apply for the Child Development Association (CDA) credential, awarded by the Council for Early Childhood Professional Recognition. This credential is awarded to competent care providers and home providers who have demonstrated the ability to meet the needs of children and parents in the home and in various childcare centers.

Early Childhood Care and Education Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
ECE	4359	Foundations of Early Childhood Care and Education	3	0	3
ECE	4360	Principles of Early Childhood Education	3	0	3
ECE	4368	Early Childhood Assessment and Observation Techniques	2	0	2
ECE	4372	Child Abuse Recognition and Prevention	1	0	1
EMS	4750	Heartsaver Pediatric First Aid/CPR	0	1	0.5
			12	1	12.5
SECOND TERM					
PSY	1505	Introduction to Psychology 1	3	0	3
ECE	4361	Early Childhood 1 - Infant/Toddler	3	0	3
ECE	4362	Early Childhood Practicum 1 - Infant/Toddler	1	7	2
ECE	4367	Art, Music, Play for Early Childhood Programs	3	0	3
ECE	4369	Parents and Families in Early Childhood Education	2	0	2
ECE	4371	Communicable Diseases of Early Childhood	1	0	1
			13	7	14
THIRD TERM					
ENG	1002	English Composition 2	3	0	3
ECE	4363	Early Childhood 2 - Preschool	3	0	3
ECE	4364	Early Childhood Practicum 2 - Preschool	1	7	2
ECE	4370	Nutrition and Health for Early Childhood Programs	3	0	3
			10	7	11
FOURTH TERM					
COMM	1020	Public Speaking	3	0	3
ECE	4374	Language Development	3	0	3
			6	0	6
FIFTH TERM					
ECE	4375	Diversity Education for Early Childhood Programs	3	0	3
XXX	XXXX	Humanities/Social Science	3	0	3
			6	0	6
					49.5

Humanities/Social Science Elective: ART 1660, MUS 1665, SOC 1273, SOC 1521, SOC 1523, SOC 1526, SOC 1528, PSY 1506, PSY 1508

Early Childhood Care and Education Leadership Certificate (ECELD)

Program Chair: Crystal Bossard

The Early Childhood Care and Education Leadership certificate provides training for students, administrators, and other personnel. Courses are offered in state-of-the-art program management techniques in administration, personnel management, fiscal management, and small business startup strategies. This certificate provides skills for directors who have management responsibilities as well as supervisory responsibilities for the care of children.

Early Childhood Care and Education Leadership Certificate

			Hours Per Week Class	Lab	Credit Hours
ACC	2924	Accounting for Non-Financial Managers	3	0	3
MGT	2967	Introduction to Management	3	0	3
MGT	2971	Small Business Start-Up 1	3	0	3
ECE	4378	Administration of Childhood Programs	4	0	4
ECE	4386	Professional, Legal, and Ethical Issues in Childhood Education	3	0	3
TC	5034	Planning and Developing Proposals	3	2	4
			19	2	20
					20

Early Childhood Care and Education Literacy Certificate (ECELC)

Program Chair: Crystal Bossard

The Early Childhood Care and Education Literacy certificate provides teachers, parents, and child care center directors an opportunity to gain skills in language and literacy development for children including oral communication, story telling, and facilitating emerging reading skills.

Early Childhood Care and Education Literacy Certificate

Students pursuing this certificate must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
			3	0	3
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
ECE	4374	Language Development	3	0	3
			6	0	6
THIRD TERM					
ENG	1003	English Composition 3	3	0	3
ECE	4381	Early Literacy 1	3	0	3
			6	0	6
FOURTH TERM					
LIT	1054	Children's Literature	3	0	3
ECE	4382	Early Literacy 2	3	0	3
			6	0	6
FIFTH TERM					
ECE	4383	Early Literacy 3	3	0	3
			3	0	3
					24

Early Childhood Care and Education Teacher Assistant Certificate (ECETA)

Program Chair: Crystal Bossard

The Early Childhood Care and Education Teacher Assistant certificate prepares students to obtain jobs in child care, preschool, and Head Start settings as a highly-qualified teacher assistant. This certificate also helps centers meet qualifications for NAEYC Accreditation and the Step Up to Quality Program.

Early Childhood Care and Education Teacher Assistant Certificate

			Hours Per Week Class	Lab	Credit Hours
ECE	4353	Role of the Teacher Assistant	3	0	3
ECE	4354	Creative Activities for Teacher Assistants	4	0	4
ECE	4355	Teacher Assistant Practicum	1	0	1
ECE	4360	Principles of Early Childhood Education	3	0	3
ECE	4370	Nutrition and Health for Early Childhood Programs	3	0	3
			14	0	14
					14

Infant/Toddler Certificate (ECEIT)

Program Chair: Crystal Bossard

The Infant/Toddler certificate provides relevant training for individuals working in early Head Start programs, early intervention sites, and family childcare providers, or anyone serving infants and toddlers and their families.

Infant/Toddler Certificate

			Hours Per Week Class	Lab	Credit Hours
ECE	4356	Enhancing Infant and Toddler Development through Play	4	0	4
ECE	4360	Principles of Early Childhood Education	3	0	3
ECE	4361	Early Childhood 1 - Infant/Toddler	3	0	3
ECE	4362	Early Childhood Practicum 1 - Infant/Toddler	1	7	2
ECE	4369	Parents and Families in Early Childhood Education	2	0	2
ECE	4376	Exceptional Children	3	0	3
			16	7	17
					17

School Age Certificate (ECESA)

Program Chair: Crystal Bossard

The School Age certificate provides relevant training for individuals working with school-age children. Participants in this program may include: recreation employees, before and after school program workers, family home providers, and community group workers who work with children from ages five through 12.

School Age Certificate

			Hours Per Week Class	Lab	Credit Hours
ECE	4357	Creative and Recreational Activities for School Age Children	4	0	4
ECE	4358	Classroom Management for Early Childhood Education	3	0	3
ECE	4360	Principles of Early Childhood Education	3	0	3
ECE	4365	Early Childhood 3 - School Age	3	0	3
ECE	4366	Early Childhood Practicum 3 - School Age	1	7	2
ECE	4369	Parents and Families in Early Childhood Education	2	0	2
ECE	4375	Diversity Education for Early Childhood Programs	3	0	3
ECE	4376	Exceptional Children	3	0	3
			22	7	23
					23

Child Development Associate Certificate (ECECDA)

The Child Development Associate certificate provides the opportunity for students to meet the requirements of the Council for Early Childhood Professional Recognition's Child Development Associate (CDA) credential.

Child Development Associate Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ECE	4359	Foundations of Early Childhood Care and Education	3	0	3
ECE	4360	Principles of Early Childhood Education	3	0	3
ECE	4368	Early Childhood Assessment and Observation Techniques	2	0	2
ECE	4370	Nutrition and Health for Early Childhood Programs	3	0	3
ECE	4372	Child Abuse Recognition and Prevention	1	0	1
			12	0	12

SECOND TERM					
ECE	4361	Early Childhood 1 - Infant/Toddler	3	0	3
ECE	4362	Early Childhood Practicum 1 - Infant/Toddler	1	7	2
ECE	4369	Parents and Families in Early Childhood Education	2	0	2
ECE	4371	Communicable Diseases of Early Childhood	1	0	1
ECE	4375	Diversity Education for Early Childhood Programs	3	0	3
EMS	4731	First Aid	0	2	1
EMS	4750	Heartsaver Pediatric First Aid/CPR	0	1	0.5
			10	10	12.5
THIRD TERM					
ECE	4363	Early Childhood 2 - Preschool	3	0	3
ECE	4364	Early Childhood Practicum 2 - Preschool	1	7	2
ECE	4367	Art, Music, Play for Early Childhood Programs	3	0	3
ECE	4388	Child Development Associate (CDA) Portfolio Development	1	2	2
			8	9	10
					34.5

Human Services Certificate (HSC)

Advisor: Crystal Bossard

The Human Services certificate develops the skills and competencies needed to enter one of the helping professions, and provides a foundation for those who plan careers related to social work, family services, criminal justice, community organizing, and other areas. Certificate program requirements, when included in the Associate of Arts degree, are the starting point for students who plan to continue their education in a human services-related field.

Human Services Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ENG	1001	English Composition 1	3	0	3
SOC	1273	Drugs in Society	3	0	3
PSY	1505	Introduction to Psychology 1	3	0	3
SOC	1521	Introduction to Sociology 1	3	0	3
XXX	XXXX	Computer Literacy Elective	2	2	3
			14	2	15
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
CRJ	1250	Introduction to Criminal Justice	3	0	3
SOC	1270	Introduction to Social Work	3	0	3
SOC	1523	Introduction to Sociology 2	3	0	3
SOC	1526	Sociology: Marriage and The Family	3	0	3
			15	0	15
THIRD TERM					
COMM	1020	Public Speaking	3	0	3
CRJ	1257	Juvenile Delinquency	3	0	3
SOC	1271	Social Welfare and Policies	3	0	3
SOC	1272	Social Problems	3	0	3
HUM	98XX	Experiential Learning Elective	1	20	2
			13	20	14
					44

Computer Literacy Elective: IT 5102, IT 5201, IT 5410, OT 1850, OT 3058
Experiential Learning Elective: HUM 9802, HUM 9803, or HUM 9804

Interpreter Training Program (ITP)

Program Chair: Dawn Caudill

The Interpreter Training Program offers extensive coursework in American Sign Language (ASL) and deaf studies. The learning environment combines classroom instruction, experiential and self-directed growth, and community activities. Students devote a great deal of time to study, practice, skill development, observation, and community involvement, as the skills needed to succeed in Interpreter Training cannot be mastered through classroom attendance alone. Graduates earn an Associate of Applied Science degree and may work as interpreters or sign language transliterators, or in other related jobs.

Interpreter Training Program

All degree-seeking students must complete a First Year Experience (FYE) course as part of the first 18 credit hours taken at Cincinnati State.

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ITP	*1091	Intermediate American Sign Language 1	3	2	4
ENG	1001	English Composition 1	3	0	3
PSY	1503	Psychology of Deafness	3	0	3
SOC	1520	Orientation to Deafness	3	0	3
			12	2	13
SECOND TERM					
ENG	1002	English Composition 2	3	0	3
ITP	1092	Intermediate American Sign Language 2	3	2	4
PSY	1505	Introduction to Psychology 1	3	0	3
ITP	5460	Interpreting for the Deaf	3	0	3
ITP	5462	Community Resources for Deaf	3	0	3
			15	2	16
THIRD TERM					
COMM	1020	Public Speaking	3	0	3
ITP	1093	Intermediate American Sign Language 3	3	2	4
PSY	1506	Introduction to Psychology 2	3	0	3
ITP	XXXX	ITP Elective	3	0	3
			12	2	13
FOURTH TERM					
ENG	1003	English Composition 3	3	0	3
ITP	5461	Preparation for ITP Practicum	3	0	3
ITP	5464	Sign-to-Voice Interpreting 1	3	2	4
ITP	5475	Educational Interpreting 1	3	0	3
			12	2	13
FIFTH TERM					
ITP	1094	Advanced American Sign Language 1	3	2	4
MAT	1121	Business Mathematics 1	3	0	3
ITP	5465	Sign-to-Voice Interpreting 2	3	2	4
ITP	5470	Transliterating 1	4	0	4
			13	4	15
SIXTH TERM					
ITP	1095	Advanced American Sign Language 2	3	2	4
ITP	5463	Role of Interpreter	3	0	3
ITP	5466	Sign-to-Voice Interpreting 3	3	2	4
ITP	5483	General Practicum	2	10	3
			11	14	14
SEVENTH TERM					
ITP	1096	Advanced American Sign Language 3	3	2	4
ITP	5467	Sign-to-Voice Interpreting 4	3	2	4
ITP	5483	General Practicum	2	10	3
XXX	XXXX	Computer Literacy Elective	2	2	3
			10	16	14
EIGHTH TERM					
ITP	5471	Medical/Technical/Legal Interpreting	4	0	4
ITP	5472	Specialized Interpreting	4	0	4
ITP	5483	General Practicum	2	10	3
			10	10	11
					109

*Beginning ASL 1, 2, and 3 (ITP 1086, ITP 1087, ITP 1088) or advisor approval of equivalent experience are prerequisites to Intermediate ASL 1.
ITP Electives: ITP 1089, ITP 5468, ITP 5478, ITP 5474, ITP 5479
Computer Literacy Elective: OT 1850, OT 1863, OT 3058, IT 5102

Deaf Studies Certificate (DSC)

Program Chair: Dawn Caudill
The Deaf Studies certificate enables students to learn about sign language and deaf culture in order to provide services as an advocate or signer, but not as a paid professional interpreter.

Deaf Studies Certificate

			Hours Per Week Class	Lab	Credit Hours
FIRST TERM					
ITP	*1091	Intermediate American Sign Language 1	3	2	4
PSY	1503	Psychology of Deafness	3	0	3
SOC	1520	Orientation to Deafness	3	0	3
ITP	5460	Interpreting for the Deaf	3	0	3
			12	2	13
SECOND TERM					
ITP	1092	Intermediate American Sign Language 2	3	2	4
ITP	5462	Community Resources for Deaf	3	0	3
ITP	5463	Role of Interpreter	3	0	3
ITP	XXXX	ITP Elective	3	0	3
			12	2	13
THIRD TERM					
ITP	1093	Intermediate American Sign Language 3	3	2	4
ITP	5464	Sign-to-Voice Interpreting 1	3	2	4
ITP	XXXX	ITP Elective	3	0	3
			9	4	11
					37

*Beginning ASL 1, 2, 3 (ITP 1086, ITP 1087, ITP 1088) or advisor approval of equivalent experience are prerequisites to Intermediate ASL 1.
ITP Electives: ITP 1089, ITP 5468, ITP 5474, ITP 5475, ITP 5478, ITP 5479

Sciences Division

Division Phone Number: (513) 569-1700

Sciences Division faculty are prepared for and dedicated to fulfilling the following divisional goals:

- Teaching the principles of physics, chemistry, and mathematics considered basic to successful studies in science-dependent fields such as engineering technologies, health technologies, science and health laboratory sciences, or technical business services.
- Teaching the principles of physics, chemistry, and mathematics considered essential to successful science studies within liberal arts programs.
- Providing in-depth instruction which prepares students for bachelor's degree studies in scientific or mathematical fields after obtaining an Associate of Science degree at Cincinnati State.

Most students who earn an Associate of Science degree continue their studies at a four-year college or university. The Sciences Division is committed to the integration of language and critical thinking skills, mathematics, and the understanding of scientific principles to provide a comprehensive problem-solving approach to learning. As a result, students receive a solid foundation for further study.

The Sciences Division emphasizes laboratory experiences, particularly in the laboratory-based chemistry and physics departments. Through observation and manipulation of laboratory materials, students gain genuine understanding of physical laws, concepts, and hypotheses and have opportunities to learn to use their own ingenuity while investigating and reporting on scientific issues and phenomena.

Mathematics and Science Readiness

Enrollment in mathematics and science courses is based on a student's readiness, which is determined at the admissions process through assessment testing and advisor interviews. Students who need to enhance skills prior to enrolling in college-level courses are assisted in selecting the appropriate Developmental Education courses described elsewhere in this catalog. As a result, students enhance their opportunities for success in their mathematics and sciences courses.

Cooperative Education

The Sciences Division shares Cincinnati State's commitment to cooperative education as an integral part of the curriculum. Cooperative education allows students to apply concepts learned in the classroom with practical, hands-on experience in real work environments. In some cases, degree-seeking students with prior work experience related to their post-baccalaureate career goals may be eligible to receive credit through the standard College procedures for granting advanced standing credit. The program chair and cooperative education coordinator must approve all substitutions in advance.

For eligibility requirements, co-op registration policies, and other issues related to cooperative education, please refer to the "Cooperative Education" section of the catalog on page 29.

Transfer Module

The Ohio Board of Regents developed the transfer module to facilitate transfer of credits from one Ohio public college or university to another. The transfer module contains 54 to 60 quarter hours of course credits in the areas of English, mathematics, arts and humanities, social and behavioral sciences, natural and physical sciences, and interdisciplinary studies. A transfer module completed at one college or university automatically meets the requirements for the transfer module at another college or university once the student is admitted. For additional information, see the "State of Ohio Policy for Institutional Transfer" and the "Transfer Module" sections of this catalog.

The Associate of Science degree contains all of the required courses for the transfer module. Students who transfer to an Ohio public university for baccalaureate degrees will find that an Associate of Science degree leads to preferential consideration at the receiving institution.

Associate of Science (ASCI)

Program Chair: Joyce Rimlinger
Co-op Coordinator: Jayne Martin Dressing
Advisor: Julie McLaughlin
The Associate of Science degree prepares students to transfer to a four-year college or university to complete a bachelor's degree in such fields as biology, chemistry, physics, or science education; or to enter pre-dentistry, pre-medicine, pre-pharmacy, or pre-veterinary programs.

For a complete listing of degree requirements, see page 72.

Workforce Development Center

Center Phone Number: (513) 569-1643
Toll Free: (888) 569-1709
www.workforcecincinnati.com

The Workforce Development Center (WDC) at Cincinnati State provides career training for individuals and meets the needs of corporations, government agencies, and not-for-profits for high-value workforce education and training that fits their specific content, timetable, and location requirements. In addition, the Center provides executive level consulting services in such areas as human resource management, Lean/Six Sigma, strategic planning, sales, and business plan development. Organizations of all types count

on WDC experts to enhance their employees' professional skills, teach new skills, re-train, and deliver highly customized, hands-on training programs. Our client work can be done at our Evendale Campus, at our customer's site, or another venue of choice.

Our training programs combine state-of-the-art classrooms and training labs, up-to-date workplace tools, real-world simulation, and hands-on, practical instruction.

WDC offers customized certificate and instructional programs, college credit linkages, and coordination with traditional academic studies. The Center recognizes the need for lifelong learning and provides training and access to College resources that promote personal and professional enrichment, financial opportunity, career pathways and employee development.

The Workforce Development Center is committed to:

- Developing and maintaining strong, mutually beneficial partnerships with business, industry, government, non-profit agencies, and professional associations
- Providing results-driven, measurable learning and consulting services that improve business operations and bottom-line profitability
- Supporting the economic development of the region through improved workforce development coordination and services

The Center provides leadership for college-wide programming and consulting services that enhance the College's presence in the Southwest Ohio region by engaging the community, organizations, and citizens in personal and professional growth and enrichment. Career pathways can be accessed and leveraged through credit and non-credit programming.

WDC offers technical certificates, and credit and non-credit courses in four major areas:

- **Industrial Maintenance and Green Technologies:** hands-on industrial training programs for professionals, as well as training services in the areas of Industrial Maintenance and Renewable Energy/ Energy Auditor on-site or on our campus.
- **Center for HAZMAT, Rescue, and Safety:** OSHA, HAZMAT, EPA, NFPA, and USDOT training, from hazardous materials response operations and disaster response management to technical rescue safety, construction safety, and general industry safety management.
- **Professional, Managerial, Leadership, and Law Enforcement:** Customized training from business basics and advanced business skills to communications, HR, and leadership training for businesses, industry, government entities, corporations, and non-profits.
- **Health Business:** career training for healthcare professionals seeking new skills, training updates, or continuing education. Programs include: Emergency Medical Services, Emergency Medical Technician, Paramedic Theory and Practice, Pediatric Advanced Life Support, Advanced Cardiac Life Support, EMT and Paramedic Refresher Courses, and BLS for Health Care Providers (CPR). Certificate programs are offered in: Nurse Aide Training, Home Healthcare Aide, Patient Care Assistant, Home Health Caregiver, Medication Aide, and Restorative Aide, Pharmacy Technician, and Phlebotomy Technician.

Disaster Response Management Certificate (HAZC)

The Disaster Response Management certificate is a 24-credit-hour program designed to meet the needs of emergency services personnel and private sector Safety and Risk Managers who are responsible for all types of emergency planning and response operations. These courses are designed to meet the National Incident Management Systems (NIMS) standard in planning and response to an All–Hazards Emergency and the new NFPA standard 1600-Disaster/Emergency Management and Business Continuity Planning (2010). Courses address incident management response and planning, threat assessments, all types of hazardous material response operations, business/organization continuity operations, and counter-terrorism planning and response. The certificate is a component of the Public Safety Technology degree program offered by the Health and Public Safety Division.

Disaster Response Management Certificate

			Hours Per Week Class	Lab	Credit Hours
THZ	1010	Basic Hazardous Materials Chemistry	2	0	2
TBE	1010	Introduction to Incident and Crisis Management	3	0	3
THZ	1020	Management Issues in Disaster Preparedness and Response	3	0	3
THZ	1030	Radiological and Biological Emergency Preparedness Planning	3	0	3
THZ	1040	Introduction To Terrorism	3	0	3
THZ	1041	Consequences of Terrorism	3	0	3
THZ	1050	Disaster Forecasting and Modeling	2	2	3
THZ	1060	Media Relations in a Crisis	2	2	2
			21	4	22
					22

Industrial Maintenance and Green Technologies Certificate Options

The Industrial Maintenance program provides individuals with Integrated Systems Technology (IST) maintenance skills. Integrated Systems Technology is a new career opportunity that involves cross-training in the areas of electrical, mechanical, and electronic systems. These evening certificate programs are designed for individuals currently working in maintenance or a related field who want to advance their careers. All Industrial Maintenance classes are conducted at the Workforce Development Center in Evendale.

Industrial Electrical Maintenance Certificate (IEMC)

The Industrial Electrical Maintenance certificate is a seven-month evening program designed by professionals in the field to provide the knowledge and hands-on experience necessary to work as an entry-level electrical maintenance technician with local industrial companies. Classes are designed for the hands-on learner. Extensive labs allow students the opportunity to practice their learning and skills on industrial applications and processes. All learning and skills lead to proficiency in the installation, maintenance, and troubleshooting of industrial electrical systems. This certificate program is used by local companies for apprentice training.

Industrial Electrical Maintenance Certificate

			Hours Per Week Class	Lab	Credit Hours
TEM	1010	Basics of Industrial Electricity	3	1	3
MMC	1010	Basic Shop Math	1	0	1
TEM	1230	Electrical Ladder Diagrams	2	1	2
TEM	1240	Industrial Power Systems 1	2	1	2
TEM	1275	Motor Control Systems	3	2	4
TEM	1285	Sensors for Industrial Control Systems	2	1	2
TEM	2010	Programmable Logic Controllers 1	3	1	3
TEM	2110	Industrial Electrical Troubleshooting	3	2	4
			19	9	21
					21

Programmable Logic Controllers Certificate (PLCC)

The Programmable Logic Controllers certificate is a 13-week, 109-hour evening program designed for individuals who will install, program, maintain, or troubleshoot Programmable Logic Controllers in an industrial setting. Students gain working knowledge of electrical ladder logics, the basis of PLC programming. Students learn the fundamentals of PLCs including processor configuration, I/O wiring, digital and analog concepts, and PLC program instructions. The advanced PLC class provides students with advanced programming instructions, remote I/O, introduction to Allen Bradley Device Net, and advanced troubleshooting. This program focuses on the Allen Bradley PLC-5 and SLC-500 PLCs and RSLogic programming.

Programmable Logic Controllers Certificate

			Hours Per Week Class	Lab	Credit Hours
TEM	1230	Electrical Ladder Diagrams	2	1	2
TEM	2010	Programmable Logic Controllers 1	3	1	3
TEM	2020	Programmable Logic Controllers 2	3	2	4
			8	4	9
					9

Industrial Controls and Instrumentation Certificate (ICIC)

The Industrial Controls and Instrumentation certificate is a 25-week, 200-hour evening program designed by ISA certified controls experts, and is designed for individuals with some electrical maintenance experience seeking advancement as an industrial controls technician. Students gain working knowledge and hands-on troubleshooting experience in electrical controls, sensors, variable frequency drives, DMCS systems, controller tuning, and calibrations. Extensive hands-on training is provided in the industrial controls labs and in the operational process pilot plant. Students receive preparation for the ISA Certified Control Systems Technician exam.

Industrial Controls & Instrumentation Certificate

			Hours Per Week Class	Lab	Credit Hours
TPI	2110	Industrial Controls & Instrumentation 1: Introduction & Pressure Control	3	1	3
TPI	2120	Industrial Controls & Instrumentation 2: Temperature	3	1	3
TPI	2130	Industrial Controls & Instrumentation 3: Level & Flow	3	1	3
TPI	2140	Industrial Controls & Instrumentation 4: Final Control Elements	3	1	3
TPI	2150	Industrial Controls & Instrumentation 5: Analytical Control	3	1	3
			15	5	15
					15

Machine Maintenance Certificate (MMC)

The Machine Maintenance certificate is designed for people with some mechanical maintenance experience who seek advancement in the maintenance field. The program provides the knowledge and hands-on experience necessary to install, maintain, and troubleshoot many mechanical and hydraulic systems. Classes are designed for the hands-on learner. Extensive labs allow students the opportunity to practice their learning and skills on industrial applications and processes.

Machine Maintenance Certificate

			Hours Per Week Class	Lab	Credit Hours
HYD	1011	Basic Industrial Hydraulics 1	3	1	3
MMC	2010	Mechanical Drive Maintenance	3	1	3
MMC	2020	Introduction to Bearings, Seals & Lubrication	1	0.5	1
MMC	2030	Vibration Analysis for Mechanical Systems	2	1	2
MMC	2040	Laser Alignment for Mechanical Systems	2	1	2
			11	4.5	11
					11

Course Descriptions

Course Number Index

0003	DE	1029	COMM	1092	ITP	1241	DT	1362	ITT	1535	LBR	1804	FIN	1935	ITT
0004	DE	1030	THZ	1093	ITP	1242	DT	1363	ITT	1537	LBR	1810	MKT	1936	ITT
0005	DE	1030	TOS	1094	ITP	1243	DT	1364	ITT	1538	LBR	1817	SCM	1937	ITT
0010	DE	1031	COMM	1095	ITP	1244	DT	1365	ITT	1539	LBR	1818	SCM	1938	ITT
0011	DE	1032	COMM	1096	ITP	1245	DT	1366	ITT	1540	LBR	1823	LAW	1939	ITT
0018	DE	1033	COMM	1098	SPN	1250	CRJ	1367	ITT	1551	GEO	1824	LAW	1940	ITT
0020	DE	1036	ENG	1099	ENG	1250	DT	1368	ITT	1552	GEO	1825	LAW	1941	ITT
0024	DE	1037	ENG	1105	MAT	1251	CRJ	1369	ITT	1553	GEO	1827	LAW	1942	ITT
0025	DE	1038	ENG	1108	MAT	1251	DT	1370	ITT	1561	HST	1828	LAW	1943	ITT
0060	ESL	1039	ENG	1111	MAT	1252	CRJ	1371	ITT	1562	HST	1829	LAW	1944	ITT
0061	ESL	1040	COMM	1112	MAT	1252	DT	1401	INM	1563	HST	1830	LAW	1950	ITT
0063	ESL	1040	LIT	1113	MAT	1253	CRJ	1403	GC	1568	HST	1831	LAW	1951	ITT
0064	ESL	1040	THZ	1121	MAT	1253	DT	1405	TEM	1569	HST	1832	LAW	1952	ITT
0098	DE	1041	LIT	1122	MAT	1254	CRJ	1410	GC	1570	HST	1832	MGT	1970	ITT
1000	HIM	1041	THZ	1123	MAT	1255	CRJ	1415	GC	1575	HST	1833	LAW	1971	ITT
1000	SSM	1042	LIT	1128	MAT	1256	CRJ	1419	GC	1576	HST	1833	MGT	1972	ITT
1000	TTT	1044	COMM	1151	MAT	1257	CRJ	1421	GC	1577	HST	1834	MGT	1973	ITT
1001	ENG	1045	COMM	1152	MAT	1270	SOC	1423	GC	1578	HST	1838	LAW	1974	ITT
1001	HIM	1045	LIT	1153	MAT	1271	SOC	1425	GC	1598	SSC	1839	LAW	1975	ITT
1001	TBE	1046	LIT	1154	MAT	1272	SOC	1426	GC	1602	CULT	1844	MKT	1976	ITT
1001	TOS	1047	LIT	1155	MAT	1273	SOC	1429	GC	1620	PHI	1845	MKT	1978	ITT
1002	ENG	1048	LIT	1156	MAT	1275	TEM	1430	GC	1621	PHI	1850	OT	1979	ITT
1002	TBE	1050	COMM	1161	MAT	1285	TEM	1431	GC	1625	PHI	1851	ACC	1980	ITT
1002	TOS	1050	LIT	1162	MAT	1298	CRJ	1432	GC	1626	PHI	1856	ACC	1990	ITT
1003	ENG	1050	THZ	1171	MAT	1298	DT	1439	GC	1628	PHI	1863	OT	1991	ITT
1003	TBE	1051	LIT	1172	MAT	1299	CRJ	1440	GC	1630	PHI	1864	OT	1992	ITT
1004	TBE	1052	LIT	1173	MAT	1299	DT	1449	GC	1631	PHI	1873	MKT	1993	ITT
1004	THZ	1053	LIT	1191	MAT	1301	ITT	1450	GC	1632	PHI	1877	SCM	1994	ITT
1005	TBE	1054	LIT	1192	MAT	1302	ITT	1451	GC	1633	PHI	1878	MKT	1995	ITT
1005	THZ	1055	LIT	1193	MAT	1303	ITT	1480	GC	1645	CULT	1880	MKT	1996	ITT
1006	TBE	1056	LIT	1198	MAT	1304	ITT	1481	GC	1647	CULT	1901	ITT	1999	BUS
1007	TBE	1057	LIT	1199	MAT	1305	ITT	1483	GC	1648	CULT	1902	ITT	2010	MMC
1008	TBE	1058	LIT	1201	DT	1306	ITT	1484	GC	1660	ART	1903	ITT	2010	TEM
1009	ENG	1059	LIT	1202	DT	1307	ITT	1490	GC	1662	ART	1904	ITT	2020	MMC
1009	TBE	1060	FRN	1203	DT	1308	ITT	1502	PSY	1663	ART	1905	ITT	2020	TEM
1010	BPI	1060	LIT	1204	DT	1309	ITT	1503	PSY	1664	ART	1906	ITT	2030	MMC
1010	ENG	1060	THZ	1205	DT	1310	ITT	1504	PSY	1665	MUS	1907	ITT	2040	MMC
1010	MMC	1061	FRN	1206	DT	1311	ITT	1505	PSY	1666	MUS	1908	ITT	2110	TEM
1010	TBE	1061	LIT	1207	DT	1312	ITT	1506	PSY	1667	MUS	1909	ITT	2110	TPI
1010	TEM	1062	FRN	1208	DT	1313	ITT	1507	PSY	1668	MUS	1910	ITT	2120	TPI
1010	THZ	1063	FRN	1209	DT	1314	ITT	1508	PSY	1669	MUS	1911	ITT	2130	TPI
1010	TOS	1064	FRN	1210	DT	1315	ITT	1509	PSY	1670	THE	1912	ITT	2140	TPI
1011	ENG	1065	FRN	1211	DT	1316	ITT	1510	PSY	1671	THE	1913	ITT	2150	TPI
1011	HYD	1076	SPN	1220	DD	1317	ITT	1511	PSY	1672	THE	1914	ITT	2202	CHE
1015	ENG	1077	SPN	1220	DT	1318	ITT	1512	ECO	1673	THE	1915	ITT	2203	CHE
1018	ENG	1078	SPN	1221	DD	1319	ITT	1513	ECO	1674	THE	1916	ITT	2204	CHE
1019	ENG	1079	SPN	1221	DT	1320	ITT	1514	ECO	1675	THE	1917	ITT	2205	CHE
1020	BPI	1080	SPN	1222	DD	1321	ITT	1515	PSY	1676	THE	1918	ITT	2221	PHY
1020	COMM	1081	SPN	1223	DD	1322	ITT	1520	SOC	1678	THE	1919	ITT	2222	PHY
1020	THZ	1082	SPN	1224	DD	1323	ITT	1521	SOC	1685	ART	1920	ITT	2223	PHY
1020	TOS	1083	SPN	1225	DD	1324	ITT	1523	SOC	1690	ART	1921	ITT	2224	PHY
1021	COMM	1084	SPN	1226	DD	1325	ITT	1525	SOC	1691	ART	1922	ITT	2231	CHE
1021	TOS	1085	SPN	1230	DT	1326	ITT	1526	SOC	1692	ART	1923	ITT	2232	CHE
1022	TOS	1086	ITP	1230	TEM	1327	ITT	1528	SOC	1694	ART	1924	ITT	2233	CHE
1023	COMM	1087	ITP	1231	DT	1328	ITT	1530	POL	1695	ART	1930	ITT	2236	CHE
1023	TOS	1088	ITP	1232	DT	1329	ITT	1530	SOC	1695	HNR	1931	ITT	2244	PHY
1024	COMM	1089	ITP	1233	DT	1330	ITT	1531	POL	1696	HNR	1932	ITT	2245	PHY
1024	TOS	1090	SPN	1240	DT	1360	ITT	1532	POL	1698	HUM	1933	ITT	2251	CHE
1025	COMM	1091	ITP	1240	TEM	1361	ITT	1533	POL	1699	HUM	1934	ITT	2252	CHE

2253	CHE	2901	MKT	2983	ITM	3520	LH	4002	MCH	4094	BIOT	4182	HFT	4312	CLT
2264	PSC	2902	MKT	2986	MGT	3523	LH	4002	SSM	4094	HLT	4183	HFT	4313	CLT
2265	PSC	2904	MGT	2987	MGT	3524	LH	4003	SSM	4095	BIO	4185	HFT	4314	CLT
2267	PSC	2905	MGT	2988	MGT	3525	LH	4004	SSM	4096	BIOT	4186	HFT	4317	CLT
2269	PSC	2906	MGT	2989	MGT	3526	LH	4005	SSM	4097	BIOT	4199	HFT	4321	CLT
2270	PHY	2907	MGT	2990	MKT	3529	LH	4009	BIO	4098	HFT	4200	END	4322	CLT
2277	PSC	2908	MGT	2996	MGT	3532	LH	4010	SSM	4098	SSM	4200	MA	4323	CLT
2281	CHE	2909	MKT	2997	MKT	3533	LH	4011	CLT	4099	BIO	4201	END	4340	CLT
2282	CHE	2910	MGT	2998	MKT	3534	LH	4011	SSM	4099	PE	4201	MA	4350	CLT
2283	CHE	2910	MKT	3002	OT	3535	LH	4014	BIO	4099	SSM	4201	ORTH	4353	CLT
2284	CHE	2914	ACC	3003	OT	3537	LH	4015	BIO	4120	HFT	4201	SSM	4353	ECE
2285	CHE	2915	ACC	3005	OT	3539	LH	4016	BIO	4120	SSM	4202	MA	4354	ECE
2286	CHE	2917	ACC	3006	OT	3540	LH	4018	BIO	4121	HFT	4202	ORTH	4355	ECE
2291	PHY	2918	ACC	3007	OT	3544	LH	4019	BIO	4121	SSM	4202	SSM	4356	ECE
2292	PHY	2919	ACC	3016	OT	3546	LH	4020	BIO	4122	HFT	4203	MA	4357	ECE
2293	PHY	2920	ACC	3017	OT	3547	LH	4021	BIO	4122	SSM	4203	SSM	4358	ECE
2294	PHY	2920	TMGT	3018	OT	3549	LH	4022	BIO	4123	HFT	4204	MA	4359	ECE
2295	PHY	2921	ACC	3019	OT	3550	LH	4023	CLT	4123	SSM	4204	SSM	4360	ECE
2296	PHY	2922	ACC	3021	OT	3552	LH	4024	CLT	4124	HFT	4205	MA	4361	ECE
2297	PHY	2924	ACC	3022	OT	3554	LH	4030	PE	4125	SSM	4206	MA	4362	ECE
2298	CHE	2925	BUS	3023	OT	3556	LH	4041	PE	4126	SSM	4207	MA	4363	ECE
2299	CHE	2926	ACC	3024	OT	3560	LH	4042	PE	4130	SSM	4209	MA	4364	ECE
2299	PSC	2927	ACC	3032	OT	3561	LH	4043	PE	4132	SSM	4210	END	4365	ECE
2520	ASM	2929	MGT	3035	OT	3562	LH	4044	PE	4133	SSM	4210	MA	4366	ECE
2521	ASM	2931	RE	3036	OT	3563	LH	4045	PE	4134	SSM	4210	ORTH	4367	ECE
2522	ASM	2932	RE	3058	OT	3564	LH	4050	PE	4141	HFT	4211	MA	4368	ECE
2525	ASM	2933	RE	3064	OT	3565	LH	4051	PE	4142	HFT	4211	ORTH	4369	ECE
2526	ASM	2937	SCM	3068	OT	3599	LH	4053	PE	4143	HFT	4213	MA	4370	ECE
2527	ASM	2938	SCM	3069	OT	3601	CUL	4054	PE	4144	HFT	4215	MA	4371	ECE
2530	ASM	2939	SCM	3070	OT	3602	CUL	4055	PE	4145	HFT	4220	END	4372	ECE
2531	ASM	2940	SCM	3076	OT	3603	CUL	4056	PE	4146	HFT	4220	MA	4374	ECE
2532	ASM	2942	ACC	3092	OT	3604	CUL	4057	PE	4147	HFT	4220	ORTH	4375	ECE
2533	ASM	2943	ACC	3093	OT	3605	CUL	4058	HFT	4148	HFT	4221	END	4376	ECE
2534	ASM	2945	ACC	3094	BUS	3606	CUL	4059	PE	4149	HFT	4221	MA	4377	ECE
2535	ASM	2946	ACC	3094	OT	3607	CUL	4060	HFT	4150	HFT	4221	ORTH	4378	ECE
2536	ASM	2947	ACC	3095	OT	3608	CUL	4060	PE	4151	HFT	4222	END	4381	ECE
2540	ASM	2948	ACC	3110	MGT	3609	CUL	4062	PE	4152	HFT	4224	MA	4382	ECE
2541	ASM	2949	ACC	3111	MGT	3610	CUL	4063	PE	4153	HFT	4230	END	4383	ECE
2542	ASM	2950	ACC	3112	MGT	3611	CUL	4064	PE	4154	HFT	4231	END	4384	ECE
2544	ASM	2951	RE	3113	MGT	3612	CUL	4065	PE	4160	HFT	4232	END	4386	ECE
2545	ASM	2953	RE	3114	MGT	3630	HRM	4066	PE	4161	HFT	4240	END	4387	ECE
2550	ASM	2954	RE	3115	MGT	3631	HRM	4067	PE	4162	HFT	4241	END	4388	ECE
2551	ASM	2956	RE	3116	MGT	3632	HRM	4068	PE	4163	HFT	4245	MA	4389	ECE
2555	ASM	2958	RE	3117	MGT	3633	HRM	4069	PE	4164	HFT	4250	END	4392	CLT
2560	ASM	2959	RE	3118	MGT	3634	HRM	4070	PE	4165	HFT	4251	END	4393	CLT
2561	ASM	2960	FIN	3119	MGT	3635	HRM	4071	BIO	4166	HFT	4260	END	4394	CLT
2570	ASM	2961	FIN	3500	LH	3636	HRM	4071	PE	4167	HFT	4261	END	4400	HIM
2599	ASM	2962	FIN	3501	LH	3638	HRM	4072	BIO	4168	HFT	4298	MA	4401	HIM
2850	PAS	2963	MGT	3502	LH	3640	HRM	4073	BIO	4169	HFT	4298	ORTH	4402	SSM
2851	PAS	2965	MGT	3504	LH	3641	HRM	4074	BIO	4170	HFT	4299	ORTH	4403	SSM
2853	PAS	2966	MGT	3505	LH	3642	HRM	4075	BIO	4171	HFT	4301	CLT	4404	SSM
2860	PAS	2967	MGT	3506	LH	3643	HRM	4075	PE	4172	HFT	4302	CLT	4407	HIM
2861	PAS	2968	FIN	3507	LH	3644	HRM	4076	BIO	4173	HFT	4303	CLT	4410	HIM
2862	PAS	2970	MGT	3508	LH	3652	HRM	4076	PE	4174	HFT	4303	SSM	4411	HIM
2863	PAS	2971	MGT	3509	LH	3653	HRM	4077	PE	4175	HFT	4304	CLT	4415	HIM
2864	PAS	2972	MGT	3510	LH	3660	HRM	4078	PE	4176	HFT	4304	SSM	4417	HIM
2865	PAS	2973	BUS	3511	LH	3661	HRM	4081	BIO	4177	HFT	4305	CLT	4419	HIM
2866	PAS	2974	ACC	3513	LH	3662	HRM	4081	PE	4178	HFT	4306	CLT	4420	HIM
2867	PAS	2975	MGT	3515	LH	3670	PCC	4082	BIO	4179	HFT	4307	CLT	4421	HIM
2868	PAS	2976	FIN	3516	LH	3671	PCC	4083	BIO	4179	PE	4308	CLT	4422	HIM
2869	PAS	2977	MGT	3517	LH	3672	PCC	4091	BIOT	4180	HFT	4309	CLT	4428	HIM
2878	PAS	2980	ITM	3518	LH	4001	MCH	4092	BIO	4180	PE	4310	CLT	4429	HIM
2899	CUL	2981	ITM	3519	LH	4001	SSM	4093	BIO	4181	HFT	4311	CLT	4431	HIM

4432	HIM	4632	DMS	4730	EMS	4783	FST	4941	NUR	5199	IT	5326	IT	5499	ITP
4449	HIM	4633	DMS	4731	EMS	4784	FST	4943	NUR	5201	IT	5329	IT	5522	IT
4450	HIM	4633	OTA	4733	EMS	4785	FST	4943	PN	5202	IT	5331	IT	5523	IT
4451	HIM	4634	DMS	4734	EMS	4786	FST	4944	PN	5204	IT	5332	IT	5524	IT
4452	HIM	4635	DMS	4735	EMS	4789	FST	4946	NUR	5205	IT	5333	IT	5525	IT
4453	HIM	4636	DMS	4736	EMS	4790	FST	4953	NUR	5206	IT	5334	IT	5526	IT
4491	HIM	4636	OTA	4737	EMS	4791	FST	4953	PN	5207	IT	5335	IT	5530	IT
4492	HIM	4637	DMS	4738	EMS	4792	FST	4954	NUR	5208	IT	5340	IT	5531	IT
4499	HIM	4637	OTA	4739	EMS	4793	FST	4954	PN	5211	IT	5351	IT	5532	IT
4500	ST	4638	DMS	4740	EMS	4794	FST	4956	NUR	5212	IT	5352	IT	5540	IT
4527	ST	4638	OTA	4741	EMS	4795	FST	4963	NUR	5216	IT	5355	IT	5541	IT
4528	ST	4640	DMS	4741	FST	4797	EMS	4963	PN	5217	IT	5361	IT	5543	IT
4529	ST	4641	DMS	4742	EMS	4798	EMS	4964	NUR	5220	IT	5362	IT	5545	IT
4530	ST	4642	DMS	4742	FST	4798	FST	4964	PN	5221	IT	5363	IT	5546	IT
4533	ST	4643	DMS	4743	EMS	4799	EMS	4965	PN	5224	IT	5380	IT	5560	IT
4534	ST	4644	DMS	4743	FST	4799	FST	4966	PN	5225	IT	5400	IT	5570	IT
4535	ST	4645	DMS	4744	EMS	4803	MCH	4971	PN	5226	IT	5405	IT	5571	IT
4538	ST	4646	DMS	4745	EMS	4805	MCH	4972	PN	5227	IT	5406	IT	5598	IT
4541	ST	4647	DMS	4745	FST	4806	MCH	4973	NUR	5228	IT	5408	IT	5599	IT
4542	ST	4648	DMS	4746	EMS	4807	MCH	4973	PN	5229	IT	5410	IT	6001	DES
4543	ST	4649	DMS	4746	FST	4808	MCH	4974	PN	5230	IT	5420	IT	6002	DES
4544	ST	4650	DMS	4747	EMS	4810	MCH	4981	NUR	5231	IT	5432	IT	6003	DES
4551	ST	4651	OTA	4747	FST	4812	MCH	4982	NUR	5232	IT	5435	IT	6004	DES
4552	ST	4652	OTA	4748	EMS	4813	MCH	4993	NUR	5233	IT	5436	IT	6005	DES
4553	ST	4653	OTA	4748	FST	4814	MCH	4998	NUR	5234	IT	5441	IT	6611	CMT
4565	ST	4654	DMS	4749	EMS	4815	MCH	4998	PN	5235	IT	5443	IT	6618	CMT
4566	ST	4655	DMS	4749	FST	4816	MCH	4999	NUR	5240	IT	5444	IT	6619	CMT
4567	ST	4656	DMS	4750	EMS	4817	HFT	4999	PN	5241	IT	5445	IT	6621	CMT
4570	STFA	4660	OTA	4750	FST	4818	HFT	5001	TC	5247	IT	5446	IT	6631	CMT
4571	STFA	4661	OTA	4751	EMS	4819	MCH	5005	TC	5251	IT	5447	IT	6641	CMT
4572	STFA	4672	DMS	4751	FST	4825	CHW	5006	TC	5252	IT	5448	IT	6649	CMT
4573	STFA	4673	DMS	4752	EMS	4827	CHW	5010	TC	5255	IT	5449	IT	6651	CMT
4574	STFA	4674	DMS	4753	FST	4828	CHW	5020	TC	5266	IT	5451	IT	6698	CMT
4575	STFA	4675	DMS	4754	EMS	4840	MCH	5021	TC	5267	IT	5452	IT	6699	PSC
4576	STFA	4676	DMS	4754	FST	4841	MCH	5032	TC	5268	IT	5453	IT	6710	LOT
4577	STFA	4677	DMS	4755	EMS	4842	MCH	5033	TC	5269	IT	5454	IT	6715	LOT
4578	STFA	4678	DMS	4757	FST	4870	MCH	5034	TC	5271	IT	5455	IT	6720	LOT
4579	STFA	4683	DMS	4760	EMS	4871	MCH	5035	TC	5272	IT	5456	IT	6730	LOT
4580	ST	4684	DMS	4760	FST	4880	MCH	5036	TC	5273	IT	5457	IT	6735	LOT
4581	ST	4685	DMS	4761	EMS	4881	MCH	5037	TC	5274	IT	5458	IT	6736	LOT
4584	ST	4687	DMS	4762	FST	4882	MCH	5041	TC	5275	IT	5459	ITP	6740	LOT
4585	ST	4688	DMS	4763	EMS	4883	MCH	5042	TC	5276	IT	5460	IT	6741	LOT
4586	ST	4698	DMS	4763	FST	4884	MCH	5045	TC	5277	IT	5460	ITP	6745	LOT
4590	ST	4699	DMS	4764	EMS	4885	MCH	5071	TC	5278	IT	5461	ITP	6749	LOT
4592	ST	4699	OTA	4764	FST	4886	MCH	5089	TC	5283	IT	5462	ITP	6750	LOT
4593	ST	4700	RT	4765	EMS	4898	END	5098	TC	5284	IT	5463	ITP	6758	LOT
4594	ST	4701	RT	4765	FST	4898	MCH	5099	TC	5291	IT	5464	ITP	6768	LOT
4598	ST	4702	RT	4766	EMS	4899	END	5102	IT	5292	IT	5465	ITP	6799	LOT
4600	OTA	4703	RT	4767	EMS	4899	MCH	5120	IT	5293	IT	5466	ITP	6810	OPT
4601	OTA	4704	RT	4768	EMS	4901	NUR	5121	IT	5294	IT	5467	ITP	6812	OPT
4610	OTA	4705	RT	4769	EMS	4918	NUR	5122	IT	5295	IT	5468	ITP	6820	OPT
4611	OTA	4706	RT	4770	EMS	4922	NUR	5125	IT	5299	IT	5470	ITP	6830	OPT
4612	OTA	4707	RT	4771	EMS	4923	NUR	5128	IT	5310	IT	5471	ITP	6831	OPT
4613	OTA	4711	RT	4772	EMS	4924	NUR	5129	IT	5311	IT	5472	ITP	6833	OPT
4614	OTA	4712	RT	4772	FST	4925	NUR	5130	IT	5312	IT	5474	ITP	6841	OPT
4620	OTA	4713	RT	4773	EMS	4926	NUR	5131	IT	5314	IT	5475	ITP	6843	OPT
4621	OTA	4714	RT	4773	FST	4927	NUR	5151	IT	5315	IT	5476	ITP	6845	OPT
4622	OTA	4715	RT	4774	FST	4928	NUR	5152	IT	5320	IT	5477	ITP	6851	OPT
4623	OTA	4716	RT	4775	FST	4931	NUR	5153	IT	5321	IT	5478	ITP	6855	OPT
4624	OTA	4718	RT	4779	FST	4933	NUR	5154	IT	5322	IT	5479	ITP	6857	OPT
4625	OTA	4719	RT	4780	FST	4933	PN	5155	IT	5323	IT	5483	ITP	6867	OPT
4630	DMS	4720	RT	4781	FST	4934	PN	5158	IT	5324	IT	5484	ITP	6899	OPT
4631	OTA	4723	RT	4782	EMS	4937	NUR	5191	IT	5325	IT	5485	ITP	7001	EET

7002	MET	7601	EVET	7747	PSET	7945	CET	8155	AVT	9245	LH
7003	EMT	7602	EVET	7748	EET	7946	CET	8160	AVT	9247	OT
7004	ET	7603	EVET	7749	BMT	7947	CET	8161	AVT	9248	PBA
7005	ET	7604	EVET	7750	EET	7948	CET	8162	AVT	9249	RE
7005	MET	7605	EVET	7751	EET	7949	CET	8170	AVT	9252	ITM
7006	EMT	7607	EVET	7752	PSET	7950	CET	8171	AVT	9253	ITM
7007	EET	7608	EVET	7755	EMT	7951	CET	8172	AVT	9254	ECM
7015	EVET	7609	EVET	7757	PSET	7952	CET	8180	AVT	9255	ECM
7020	CET	7610	EVET	7759	BMT	7953	CET	8181	AVT	9300	ET
7024	CET	7611	EVET	7767	PSET	7954	CET	8182	AVT	9350	IT
7025	CET	7612	EVET	7768	EET	7955	CET	8183	AVT	9362	EMS
7026	CET	7613	EVET	7768	PSET	7956	CET	8185	AVT	9368	HFT
7070	CET	7614	EVET	7769	PSET	7958	CET	8190	AVT	9372	NUR
7071	CET	7616	EVET	7770	PSET	7959	CET	8191	AVT	9373	BIOT
7072	CET	7617	EVET	7771	EET	7960	CET	8199	AVT	9373	HIM
7073	CET	7618	EVET	7771	PSET	7961	CET	8200	AVT	9374	CLT
7074	CET	7619	EVET	7778	EET	7962	CET	8201	AVT	9376	RT
7075	CET	7620	EVET	7779	EET	7963	CET	8202	AVT	9378	HFT
7076	CET	7622	EVS	7780	EET	7964	CET	8300	AVT	9386	RT
7077	CET	7623	EVS	7781	EET	7967	CET	8306	AVT	9387	MA
7078	CET	7624	EVS	7790	PSET	7968	CET	8307	AVT	9388	MA
7079	CET	7625	EVET	7791	EMTR	7969	CET	8308	AVT	9400	CIT
7080	CET	7626	EVET	7791	PSET	7970	CET	8310	AVT	9401	CIT
7081	CET	7628	EVET	7792	EMTR	7971	CET	8311	AVT	9405	CIT
7082	CET	7630	EVET	7793	EMTR	7972	CET	8320	AVT	9500	IT
7099	BLD	7632	EVET	7794	EMTR	7973	CET	8321	AVT	9501	IT
7099	ET	7640	EVET	7799	EET	7974	CET	8330	AVT	9801	HUM
7108	MET	7643	EVET	7801	IDT	7975	CET	8331	AVT	9802	HUM
7110	MET	7644	EVET	7805	IDT	7976	CET	8500	ITE	9803	HUM
7111	MET	7646	EVET	7825	IDT	7977	CET	8700	ITE	9804	HUM
7120	MET	7647	EVET	7850	IDT	7980	CET	8900	ITE	9805	HUM
7121	MET	7648	EVET	7855	IDT	7981	CET	9001	FYE	9806	HUM
7122	MET	7670	EVET	7870	IDT	7982	CET	9002	FYE	9807	HUM
7125	MET	7671	EVET	7880	IDT	7983	CET	9003	FYE	9900	ECE
7130	MET	7672	EVET	7890	IDT	7984	CET	9014	CAR	9901	ECE
7132	MET	7675	EVET	7891	EMTR	7985	CET	9015	CAR	9902	ECE
7140	MET	7676	EVET	7893	EMTR	7986	CET	9100	SSM	9905	ECE
7141	MET	7677	EVET	7894	EMTR	7987	CET	9200	BT		
7145	MET	7680	EVET	7895	EMTR	7988	CET	9200	SSM		
7146	EMT	7681	EVET	7896	EMTR	7989	CET	9201	SSM		
7148	MET	7682	EVET	7897	EMTR	7990	CET	9202	BT		
7150	MET	7683	EVET	7910	CET	7991	CET	9210	SSM		
7152	MET	7699	EVET	7913	CET	7992	CET	9211	SSM		
7155	MET	7701	EET	7914	CET	7993	CET	9218	TMGT		
7157	EMT	7705	EET	7915	CET	7994	CET	9219	TMGT		
7158	MET	7706	EET	7915	PSET	7999	CET	9220	ACC		
7167	EMT	7707	EET	7920	CET	8100	AVT	9221	ASM		
7198	MET	7710	EET	7921	CET	8101	AVT	9222	BUS		
7199	MET	7711	EET	7926	CET	8102	AVT	9223	GC		
7220	MET	7716	EET	7927	CET	8106	AVT	9224	HOSP		
7230	MET	7717	PSET	7928	CET	8107	AVT	9225	LH		
7240	MET	7718	PSET	7929	CET	8108	AVT	9227	OT		
7250	MET	7720	EET	7930	CET	8109	AVT	9228	PBA		
7310	MET	7721	EET	7931	CET	8130	AVT	9229	RE		
7320	MET	7728	EET	7932	CET	8131	AVT	9230	BUS		
7330	MET	7730	EET	7934	CET	8132	AVT	9231	BUS		
7340	MET	7733	EET	7935	CET	8140	AVT	9232	BUS		
7345	MET	7736	EET	7936	CET	8142	AVT	9233	BUS		
7346	MET	7737	PSET	7940	CET	8143	AVT	9240	ACC		
7351	MET	7738	EET	7941	CET	8150	AVT	9241	ASM		
7355	MET	7739	BMT	7942	CET	8151	AVT	9242	BUS		
7360	MET	7739	PSET	7943	CET	8152	AVT	9243	GC		
7600	EVET	7740	EET	7944	CET	8154	AVT	9244	HOSP		

ACC Accounting

1851 Auditing 3-0-3
A course on auditing techniques and procedures for manual and computer-based accounting. Topics include: review of internal control; preparing audit programs, flowcharts, and working papers; and internal auditing.
Prerequisites: ACC 2913 or ACC 2927.

1856 Accounting Information Systems 3-0-3
A course on the documentation, design, and operation of an accounting information system. Topics include: internal control, business processes, and development of an accounting information system. Students learn to flowchart an accounting information system and to evaluate accounting software.
Prerequisites: ACC 2927.

2914 Cost Accounting 1 3-0-3
An introduction to the principles and practices of cost accounting. Topics include: manufacturing costs, cost terminology, cost flows, and allocation of overhead costs and product costing using the job order costing system.
Prerequisites: ACC 2912 or ACC 2926.

2915 Cost Accounting 2 3-0-3
A continuation of ACC 2914. Topics include: the process costing system, lost units, joint products and by-products, standard costing and variance analysis, and an introduction to cost management systems.
Prerequisites: ACC 2914.

2917 Federal Taxation 1 3-0-3
A study of Federal income tax as it relates to the individual taxpayer. The course deals in general terms with the most common aspects of taxes as they relate to the individual and to business.
Prerequisites: None.

2918 Federal Taxation 2 3-0-3
A study of Federal income tax. Topics include: corporations, partnerships, S corporations, and property transactions.
Prerequisites: None.

2919 Intermediate Accounting 1 4-0-4
A continuation of ACC 2927. Topics include: preparation and analysis of all four financial statements and required disclosures; special problems in accounting for current assets such as cash, accounts, and notes receivable; and inventory.
Prerequisites: ACC 2913 or ACC 2927.

2920 Intermediate Accounting 2 4-0-4
A continuation of ACC 2919. Topics include: plant assets, investments, liabilities, contributed capital, and retained earnings.
Prerequisites: ACC 2919.

2921 Managerial Accounting 5-0-5
A course on the accounting concepts and procedures relevant to preparing reports used by management for planning, controlling, and decision making. Topics include: cost-volume profit analysis, job-order costing, activity based costing, and budgeting.
Prerequisites: ACC 2913 or ACC 2927.

2922 Computerized Accounting Applications 2-2-3
A course on processing typical business transactions using computerized accounting software. Topics include: integrated accounting applications such as general ledger, accounts receivable, accounts payable, payroll, fixed assets, and depreciation and inventory. Laboratory work uses software similar to programs used in business and industry.
Prerequisites: ACC 2912 or ACC 2926.

2924 Accounting for Non-Financial Managers 3-0-3
A basic approach to accounting and finance so non-financial managers can participate in the organizational financial decision-making process. Topics include: understanding financial data from a user's perspective, budgeting, and problem-solving strategies to improve company finances.
Prerequisites: DE 0020 (minimum grade B) or appropriate mathematics placement test score.

2926 Financial Accounting 1 3-2-4
A course on accounting fundamentals. Topics include: the accounting cycle for service and merchandising companies, inventory, cash, and accounts receivable.
Prerequisites: None.

2927 Financial Accounting 2 2-2-3
A continuation of ACC 2926. Topics include: plant assets, current liabilities and payroll, stock transactions, corporate income reporting, bonds payable, and the statement of cash flows.
Prerequisites: ACC 2926.

2942 Fund Accounting for Nonprofit Organizations 3-0-3
A course on principles and practices of accounting for nonprofit organizations. Topics include: transaction analysis, appropriations, encumbrances, budgeting, and financial reporting.
Prerequisites: ACC 2913 or ACC 2927.

2943 Intermediate Accounting 3 3-0-3
A continuation of ACC 2920. Topics include: provision for income taxes, pensions, post-retirement benefits, leases, accounting changes, and financial statement analysis.
Prerequisites: ACC 2920.

2945 Payroll Procedures 1-0-1
An in-depth course on payroll procedures. Topics include: payroll regulations, payroll tax returns (federal and state), timekeeping, and employee record keeping.
Prerequisites: ACC 2912 or ACC 2926.

2946 Computerized Income Tax Preparation 0-2-1
A hands-on course on federal individual and sole proprietorship income tax preparation using TurboTax software. Topics include: organizing income tax information and utilizing the tax-planning feature of the software.
Prerequisites: ACC 2917.

2947 Computerized Bookkeeping 1 1-2-2
A course on the practical application of processing business transactions using QuickBooks software. Topics include: system set-up, processing transactions, and generating financial reports. Students complete a practice set.
Prerequisites: ACC 2911 or ACC 2926 or ACC 2924, OT 1850.

2948 Computerized Bookkeeping 2 1-2-2
A continuation of ACC 2947. Topics include: banking, payroll, inventory, credit cards, and budgeting.
Prerequisites: ACC 2947.

2949 State and Local Taxation 1-0-1
Preparation of state and local tax returns emphasizing Ohio requirements. Topics include: franchise tax, commercial activity tax, personal property tax, city income tax, sales and use taxes, real estate tax, and other taxes related to businesses.
Prerequisites: ACC 2926.

2950 Financial Statement Analysis 2-0-2
A course on understanding and interpreting corporate financial statements. Topics include: trend analysis, common-size statements, and ratio analysis.
Prerequisites: None.

2974 Topics for Bookkeeping 2-0-2
A continuation of ACC 2912 for students seeking a bookkeeping degree or certificate. Topics include: the conceptual framework, reversing entries, perpetual inventory cost flow methods, estimating inventory, and exchanges of plant assets.
Prerequisites: ACC 2927.

9220 Cooperative Education Accounting 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ACC program, 2.0 minimum GPA.

9240 Cooperative Education Accounting-Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ACC program, 2.0 minimum GPA.

ART Art
ASM Automotive Service Management

ART Art

1660 Introduction to Art 3-0-3
An introduction to visual artistic expression in Western culture from ancient times to the present. Topics include: examining painting, sculpture, architecture, and other media for their style, function, and relationship to the historical and cultural developments of the period.
Prerequisites: None.

1662 Art of the Ancient World 3-0-3
A course on art history including prehistoric, early Christian, Byzantine, Near Eastern, and Islamic Art. Topics include: exploration of philosophical, cultural, and religious attitudes and their effects on artistic expression in pottery, painting, architecture, and sculpture.
Prerequisites: None.

1663 Art of the Medieval and Renaissance World 3-0-3
Art history including India, China, and Japan before 1400, and European art from the Middle Ages to the Renaissance period. Topics include: exploration of philosophical, cultural, and religious attitudes and their effects on artistic expression in ceramics, paintings, architecture, and sculpture. Field trip to museum required.
Prerequisites: None.

1664 Art of the Modern World 3-0-3
Art history including India, China, and Japan after 1100, and European and American art from the colonial period through the twentieth century. Topics include: exploration of philosophical, cultural, and religious attitudes and their effects on artistic expression in ceramics, paintings, architecture, and sculpture. Field trip to museum required.
Prerequisites: None.

1685 Introduction to Photography 2-3-3
A course on fundamentals of photography for personal and professional expression, using hand-held 35mm cameras. Topics include: camera techniques, exposure meters, lighting, and black-and-white print development. Students must provide their own camera, film, and some supplies.
Prerequisites: None.

1690 Drawing 1 2-2-3
A course on fundamental techniques of drawing in pencil and other media, emphasizing visual observation and realistic expression.
Prerequisites: None.

1691 Drawing 2 2-2-3
A course on fundamental techniques of drawing, emphasizing the human figure.
Prerequisites: ART 1690.

1692 Design 1 2-3-3
An introduction to basic elements and techniques of design including principles of two-dimensional organization.
Prerequisites: None.

1694 Sculpture 1 2-3-4
A course on various sculpture media beginning with clay. Topics include: fabrication techniques and traditional methods of pinch, coil, and slab formations.
Prerequisites: None.

1695 Sculpture 2 2-3-4
A continuation of ART 1694, emphasizing refinement of conceptual and technical skills. Topics include: integrating form and function and improving design and craftsmanship.
Prerequisites: ART 1694.

ASM Automotive Service Management

2520 Introduction to Automotive Technology 2-3-3
An orientation course that familiarizes students with safe and proper procedures while using various shop chemicals, tools, fasteners, and equipment. Topics include: ASE certification and customer concerns.
Prerequisites: None.

2521 Automotive Service Desk Operations 2-2-3
A course on the duties and responsibilities of an automotive service advisor. Topics include: customer interactions, working with technicians and other dealer departments, preparing labor and parts estimates, completing automotive repair orders, and using shop and administrative software packages.
Prerequisites: ENG 1010 or instructor consent.

2522 Fundamentals of Automotive Service Management 2-2-3
A course on automotive service manager duties and responsibilities. Topics include: applying management techniques to the automotive service environment, directing automotive service facility operations, determining overhead and equipment costs, and determining workforce needs and training.
Prerequisites: MGT 2967 or MGT 2965; MKT 2901, ASM 2521.

2525 Engine Fundamentals 1 2-3-3
A general course on conventional engine repairs. Topics include: various components and parts such as timing belts, camshafts, lifters, head gaskets, oil pumps, manifold valves, flywheels, and gasket materials.
Prerequisites: None.

2526 Engine Fundamentals 2 2-3-3
A continuation of ASM 2525. Topics include: total engine replacement versus engine replacement with short or long blocks as an alternative to engine overhaul. Students complete cooling system service during engine removal and replacement.
Prerequisites: ASM 2525.

2527 Engine Rebuild 2-3-3
A continuation of ASM 2526. Topics include: internal combustion engine cylinder block and head rebuilding procedures, hands-on engine disassembly, failure diagnosis, cleaning, measuring, machining, and assembly.
Prerequisites: ASM 2526.

2530 Engine Performance 1 2-3-3
A course on engine mechanical testing procedures. Topics include: cylinder power balance, compression, and cylinder leakage testing and the theory, diagnosis, and repair of distributor-type ignition systems.
Prerequisites: ASM 2525, ASM 2540.

2531 Engine Performance 2 2-3-3
A continuation of ASM 2530. Topics include: the onset, theory, diagnosis, and repair of computer-controlled fuel, ignition and emission systems and hands-on trouble tree diagnosis and repair of these systems using computer-enhanced fault detection codes, stationary diagnostic equipment, and hand-held scanners.
Prerequisites: ASM 2530.

2532 Engine Performance 3 2-3-3
A continuation of ASM 2531. Topics include: fuel injection and emission control system failures and diagnosis, a systematic approach to diagnosing intermittent drivability complaints, distributorless ignition problems, and computer-controlled electronic failures.
Prerequisites: ASM 2531.

2533 Alternative Fuels and Hybrid Vehicle Technology 2-3-3
An introduction to current developments in vehicle fuels and power trains. Topics include: changes in engine control systems to function with new fuels, developments in more efficient power trains, and hybrid engine systems.
Prerequisites: ASM 2531.

2534 Basic Driveline Service and Repair 2-3-3
An introductory course in automatic and manual transmission service. Topics include: transmission removal and replacement, axle and drive shaft replacement, clutch service, and axle bearing replacement.
Prerequisites: ASM 2520.

2535 Automatic Transmission 1 2-3-3
An introduction to basic automatic transmission testing and service procedures. Topics include: diagnosing unusual fluid usage, performing visual inspection, pressure testing, servicing filters, replacing external seals and bushings, checking condition and alignment of mounts, and removing and installing transmissions and transaxles.
Prerequisites: None.

2536 Automatic Transmission 2 2-3-3
A continuation of ASM 2535. Topics include: theory, operation, service, and overhaul of automatic transmissions and transaxles and diagnosis and overhaul of various manufacturers' products.
Prerequisites: ASM 2535.

2540 Automotive Electrical Diagnosis 1 2-3-3
An introduction to systematic diagnosis and repair of basic electrical circuits. Topics include: step-by-step testing procedures using equipment such as a test light, self powered test light, and digital multimeter.
Prerequisites: None.

2541 Automotive Electrical Diagnosis 2 2-3-3
A continuation of ASM 2540. Topics include: the theory, diagnosis, and repair of starting and charging systems. Students gain hands-on experience in wiring schematic interpretation associated with testing electric cooling fan circuits, warning light systems, and various electronic gauge systems.
Prerequisites: ASM 2540.

2542 Automotive Electrical Diagnosis 3 2-3-3
A course on advanced theory, diagnosis, and service of automotive electrical systems. Topics include: printed circuits, driver information systems, cruise control systems, windshield wiper systems, heated glass, and electronic door lock mechanisms.
Prerequisites: ASM 2540.

2544 Automotive Accessories and Upgrades 2-3-3
A course on installing, repairing, and upgrading automotive accessories. Topics include: radios, keyless entry and remote starter systems, alarms, entertainment, navigation, and safety systems.
Prerequisites: ASM 2540 or instructor consent.

2545 Advanced Electrical/Hydraulics/Safety 2-3-3
A course on advanced diagnosis and service of anti-lock braking systems, digital instrumentation circuits, motor driven accessory circuits, and supplemental restraint (air bag) systems.
Prerequisites: ASM 2540.
Corequisites: ASM 2555.

2550 Manual Transmission and Drive Line 1 2-3-3
A course on theory, diagnosis, and repair of manual transmissions and drive line components. Topics include: clutches, pressure plates, constant velocity joints, universal joints, drive shafts, seals, and gaskets.
Prerequisites: None.

2551 Manual Transmission and Drive Line 2 2-3-3
A course on the theory, diagnosis, and internal repair of manual transmissions and transaxles. Topics include: abnormal noise, hard shifting, jumping out of gear, gear ratios, overdrive components, and sealing methods.
Prerequisites: ASM 2550.

2555 Braking Systems 2-3-3
A course on operation, inspection, diagnosis, and repair of conventional braking systems. Topics include: live vehicle performance testing on the Hunter Brake Tester, disc and drum service, lathe machining operations, measuring procedures, power assisted units, combination valves, and basic anti-lock service.
Prerequisites: None.

2560 Suspension and Steering 2-3-3
A course on theory, operation, and service of rack and pinion units. Topics include: steering gear boxes, short-long arm suspension components, MacPherson strut units, independent rear suspension parts and other suspension and steering components, riding height measurements, caster, camber, toe, thrust line, set back, and four-wheel alignment procedures.
Prerequisites: None.

2561 Alignment and Advanced Chassis Systems 2-3-3
An advanced course on alignment and suspension service. Topics include: four-wheel and two-wheel alignment; diagnosis of vibration and suspension problems; noise, vibration, and harshness troubleshooting; and electronically-controlled steering and suspension controls.
Prerequisites: ASM 2560.

2570 Air Conditioning & Heating 2-3-3
A course on theory, operation, diagnosis, and ozone-safe service of basic air conditioning and heating systems. Topics include: hands-on performance testing, pressure and leak testing, inspecting seals and valves, recycling refrigerant, and diagnosing electrical and mechanical controls, compressors, clutches, pressure cut-off switches, and safety devices.
Prerequisites: None.

2599 Special Studies - Automotive Service Management Var-Var-Var
Special studies occur on an individual basis to provide students with the opportunity to work on special technical topics in the Automotive Service field. This course may be substituted for technical elective credits.
Prerequisites: Instructor consent.

9221 Cooperative Education-Automotive Service Management 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ASM program, 2.0 minimum GPA.

9241 Cooperative Education Automotive-Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ASM program, 2.0 minimum GPA.

AVT Aviation Maintenance Technology

8100 Aircraft Orientation 4-4-5
Topics include: weighing aircraft, performing complete weight-and-balance check, and recording data; starting, grounding, operating, moving, servicing, and securing aircraft; identifying typical ground operation hazards; and identifying and selecting fuels.
Prerequisites: None.

8101 Materials & Processes 1 2-3-3
Topics include: identifying and selecting proper hand tools for particular applications; hand forming, laying out, and bending sheet metal; and performing precision measurements.
Prerequisites: None.

8102 Aerodynamics & FAA Regulations 3-2-3
Students must demonstrate ability to read, comprehend, and apply information contained in FAA and manufacturers' aircraft maintenance specifications, data sheets, manuals, publications and related Federal Aviation Regulation, Airworthiness Directives, and Advisory Material.
Prerequisites: None.

8106 Aircraft Drawings 2-2-2
Topics include: using aircraft drawings, symbols, and system schematics; drawing sketches of repairs and alterations; and using blueprint information, graphs, and charts.
Prerequisites: None.

8107 Materials & Processes 2 4-6-6
Topics include: fabricating and installing rigid and flexible fluid lines and fittings; identifying and selecting appropriate non-destructive testing methods; performing dye penetrant, eddy current, ultrasonic, and magnetic particle inspections; performing basic heat-testing processes; identifying and selecting aircraft hardware and materials; and inspecting and checking welds.
Prerequisites: None.

8108 Aircraft Electricity 3-2-3
Topics include: calculating and measuring capacitance and inductance; calculating and measuring electrical power; measuring voltage, current, resistance, and continuity; determining the relationship of voltage, current, and resistance in electrical circuits; reading and interpreting aircraft electrical circuit diagrams including solid state devices and logic functions; and inspecting and servicing batteries. Material covered in PHY 2221 is helpful in completing this course.
Prerequisites: None.

8109 Cleaning & Corrosion Control 2-3-3
Topics include: identifying and selecting cleaning materials; inspecting, identifying, removing, and treating aircraft corrosion; and performing aircraft cleaning.
Prerequisites: None.

8130 Airframe Structures 1 3-7-5
Topics include: servicing and repairing wood structures; identifying wood defects; inspecting wood structures; selecting and applying fabric and fiberglass covering materials; inspecting, testing, and repairing fabric and fiberglass; applying trim, letters, and touch-up paint; identifying and selecting aircraft finishing materials; applying finishing materials; inspecting finishes and identifying defects; inspecting bonded structures; and inspecting, testing, and repairing fiberglass, plastics, honeycomb, composite, and laminated primary and secondary structures.
Prerequisites: AVT 8107.

8131 Welding Processes 1-4-2
Topics include: welding magnesium and titanium; soldering stainless steel; fabricating tubular structures; soldering, brazing, gas-welding, and arc-welding steel; and welding aluminum and stainless steel.
Prerequisites: AVT 8107.

8132 Aircraft Electrical & Generating Systems 4-6-6
Topics include: repairing and inspecting aircraft electrical system components; crimping and splicing wiring to manufacturer specifications; repairing pins and sockets of aircraft connectors; inspecting, troubleshooting, servicing, and repairing alternating and direct current electrical systems; inspecting, checking, and troubleshooting constant speed and integrated speed drive generators; installing, checking, and servicing airframe electrical wiring, controls, switches, indicators, and protective devices; and inspecting, checking, troubleshooting, and servicing landing gear position indicating and warning systems.
Prerequisites: AVT 8108 or PHY 2221.

8140 Airframe Structures 2 3-7-5
Topics include: selecting, installing, and removing special fasteners for metallic, bonded, and composite structures; inspecting, checking, servicing, and repairing windows, doors, and interior furnishings; inspecting and repairing sheet metal structures; and installing conventional rivets.
Prerequisites: AVT 8107.

8142 Assembly & Rigging 3-7-5
Topics include: rigging rotary- and fixed-wing aircraft; checking alignment of structures; assembling aircraft components including flight control surfaces; balancing, rigging, and inspecting movable primary and secondary flight control surfaces; and jacking aircraft.
Prerequisites: AVT 8107.

8143 Airframe Hydraulic & Pneumatic Systems 1-4-2
Topics include: repairing hydraulic and pneumatic power systems components; identifying and selecting hydraulic fluids; and inspecting, checking, servicing, troubleshooting, and repairing hydraulic and pneumatic power systems.
Prerequisites: AVT 8107.

8150 Airframe Electronic and Instrument Systems 4-6-6
Topics include: inspecting, checking, servicing, troubleshooting, and repairing electronic flight instrument systems and mechanical and electrical heading-, speed-, altitude-, temperature-, pressure-, and position-indicating systems including the use of built-in test equipment; installing instruments and performing a static pressure system leak test; and inspecting, checking, and servicing navigation systems, including VHF passenger aircraft VOR, ILS, LORAN.
Prerequisites: AVT 8132.

8151 Landing Gear Systems 3-7-5
Topics include: inspecting, checking, servicing, and repairing landing gear, retraction systems, shocks, struts, brakes, wheels, tires, and steering systems; and inspecting, checking, troubleshooting, and servicing landing gear position indicating and warning systems.
Prerequisites: AVT 8143.

8152 Airframe Inspection 1-4-2
Topics include: performing airframe and powerplant conformity and airworthiness inspection.
Prerequisites: None.

8154 Airframe Systems 4-6-6
Topics include: inspecting, checking, troubleshooting, and repairing the following systems and components: heating, cooling, air conditioning, pressurization, air cycle machines, oxygen, fuel dump, fuel system components, fluid quantity indicating pressure fueling systems, fluid pressure and temperature warning, airframe ice and rain control, fire detection and extinguishing, smoke and carbon monoxide detection systems; and performing fuel system management transfer and refueling.
Prerequisites: AVT 8100, AVT 8107, AVT 8108.

8155 Airframe Comprehensive 2-1-2
A comprehensive study and review of all required material preparing students for the comprehensive examination. Students must demonstrate the proficiency required to be awarded the degree and be named a candidate for the Federal Aviation Agency written test.
Prerequisites: All general and airframe courses.

8160 Powerplant Theory & Maintenance 1 5-5-7
An introduction to the design, manufacture, and overhaul of aircraft reciprocating engines. Topics include: overhaul and inspection of an opposed reciprocating engine.
Prerequisites: MAT 1191, PHY 2222, AVT 8102.

8161 Powerplant Lubrication 3-2-4
Topics include: identifying and selecting proper lubricants; inspecting, checking, servicing, troubleshooting, and repairing reciprocating and turbine engine lubrication systems; identifying and selecting propeller lubricants.
Prerequisites: PHY 2221, AVT 8102, AVT 8106.
Corequisites: AVT 8160.

8162 Propellers 4-4-4
Topics include: inspecting, checking, servicing, and repairing propeller synchronizing and ice control systems and balance propellers; repairing propeller control system components; inspecting, checking, servicing, and repairing fixed pitch constant speed and feathering propellers and propeller governing systems; and installing and repairing propellers.
Prerequisites: MAT 1191, PHY 2221, AVT 8109.
Corequisites: AVT 8161.

8170 Powerplant Theory & Maintenance 2 5-5-7
Topics include: inspecting and repairing a radial engine; installing, troubleshooting, and removing reciprocating and turbine engines; installing and troubleshooting auxiliary powerplants; and performing powerplant conformity and airworthiness inspections.
Prerequisites: AVT 8160.

8171 Powerplant Fuel Metering Systems 1 5-5-5
Topics include: inspecting, checking, and servicing water injection systems; overhauling a carburetor; repairing fuel metering components; inspecting, checking, servicing, troubleshooting, and repairing reciprocating carburetor systems, induction manifolds, and reciprocating fuel injection systems; and troubleshooting and inspecting turbine fuel metering systems.
Prerequisites: AVT 8100, AVT 8107.

8172 Ignition Systems 4-6-6
Topics include: overhauling magneto and ignition harnesses; repairing engine ignition system components; inspecting, checking, servicing, troubleshooting, and repairing powerplant ignition systems and turbine ignition and starting systems.
Prerequisites: AVT 8108.

8180 Engine Systems & Inspection 5-5-5
Topics include: inspecting, checking, troubleshooting, servicing, and repairing engine induction, cooling, exhaust, and electrical systems and components.
Prerequisites: AVT 8101, AVT 8108.

8181 Engine Inspection 4-4-5
Topics include: inspecting, checking, servicing, and repairing reciprocating and turbine engines and engine installations.
Prerequisites: None.

8182 Engine Instruments & Fire Protection 2-3-3
Topics include: inspecting, checking, servicing, troubleshooting, and repairing engine temperature, pressure, and RPM indicating systems; inspecting and repairing fire detection systems; and repairing engine electrical systems.
Prerequisites: AVT 8108.

8183 Powerplant Theory & Maintenance 3 5-5-7
Topics include: overhauling turbine engines.
Prerequisites: PHY 2222, AVT 8170.

8185 Powerplant Comprehensive 2-1-2
A comprehensive study and review of all required material preparing students for the comprehensive examination. Students must demonstrate the proficiency required to be awarded the degree and be named a candidate for the Federal Aviation Agency written test.
Prerequisites: All general and powerplant courses.

8190 Aviation Make-Up Var-Var-Var
An opportunity for students to make up FAA required time. Laboratory, written, or reading requirements or extra time on lab projects may be performed during this time.
Prerequisites: None.

8191 General Comprehensive 4-0-4
A course that improves student performance on the FAA general written, oral, and practical tests. Topics include: FARs, physics, electricity, and weight and balance.
Prerequisites: Program chair consent.

8199 Aviation Project Var-Var-Var
A variable combination of aviation lab projects and theory subjects offered to address particular needs of aviation students in atypical situations.
Prerequisites: Program chair consent.

8200 Avionics Orientation 3-2-4
An introduction to the repair of avionics equipment. Topics include: avionics repair procedures for air carriers and repair stations, publications, tools, and the build-up and marking of wire bundles.
Prerequisites: None.

8201 Avionics 1 3-2-4
Topics include: digital electronics with a direct application to aircraft systems including servos, a review of Boolean algebra, logic gates, ARNIC Codes, and troubleshooting aircraft digital systems.
Prerequisites: AVT 8154.

8202 Avionics 2 3-2-4
Topics include: amplifier theory, analog communications theories as they apply to aircraft navigation, communication, intercom, public address, and passenger entertainment systems.
Prerequisites: AVT 8150, AVT 8201.

8300 Preventive Maintenance 2-2-3
Pilots learn to identify, perform, and record maintenance and approve the return to service of their own aircraft. Topics include: changing engine oil; adjusting timing of ignition systems; cleaning, adjusting, and installing spark plugs; and other basic aircraft maintenance tasks.
Prerequisites: None.

8306 Turbojet Engine Orientation 1 2-2-3
A technical elective for the pilot, avionics, and airframe certificate programs. Topics include: basic concepts of turbine engine theory, construction, and disassembly.
Prerequisites: None.

8307 Turbojet Engine Orientation 2 1-1-1
An introductory course for students not enrolled in the Aviation Maintenance Technology Program. Topics include: basic concepts of turbine engine theory, construction, and disassembly.
Prerequisites: None.

8308 Turbojet Engine Orientation 3 2-1-2
An introductory course for students not enrolled in the Aviation Maintenance Technology Program. Topics include: basic concepts of turbine engine theory, construction, and disassembly.
Prerequisites: None.

8310 Private Pilot Theory 3-0-3
Prepares students for the FAA Private Pilot Written Test. Topics include: Federal Aviation Regulations for pilots, navigation, weight and balance calculations, meteorology, basic aerodynamics, flight controls, and aircraft systems.
Prerequisites: None.

8311 Private Pilot Flight Lab 2-4-4
Prepares students for the Private Pilot Flight Test. Examples of flight maneuvers include: takeoffs, landings, climbs, turns, descents, slow flight stalls, traffic patterns, emergency procedures, and cross country navigation.
Prerequisites: None.
Corequisites: AVT 8310.

8320 Instrument Pilot Theory 3-0-3
Ground instruction for the FAA Instrument Pilot Written Test. Topics include: instruments and systems, IFR flight planning, radio aids to navigation, en route operations charts, approach and airport charts, meteorology, and instrument pilot privileges and limitations.
Prerequisites: AVT 8310, AVT 8311.

8321 Instrument Pilot Flight Lab 2-4-4
Prepares students for the Instrument Pilot Test. Examples of flight maneuvers include: ILS, VOR, and ADF approaches, en route procedures, holding patterns, and communication procedures.
Prerequisites: AVT 8310, AVT 8311.
Corequisites: AVT 8320.

8330 Commercial Pilot Theory 3-0-3
Prepares students for the FAA Commercial Pilot Written Test. Topics include: commercial pilot privileges and limitations, advanced flight maneuvers, meteorology, and complex airplane performance.
Prerequisites: AVT 8310, AVT 8311.

8331 Commercial Pilot Flight Lab 2-4-4
Prepares students for the Commercial Pilot Flight Test. Examples of flight maneuvers include: operation of complex airplanes and advanced flight maneuvers.
Prerequisites: AVT 8310, AVT 8311.
Corequisites: AVT 8330.

BIO Biology

4009 General Microbiology 3-3-4
An introduction to principles of immunology and control of microorganisms. Topics include: microbial cell structure, metabolism, growth requirements, and ecology.
Prerequisites: BIO 4083 or BIO 4014 (minimum grade C for both).

4014 Anatomy and Physiology 1 3-2-4
A course on structure and function of the human body. Topics include: anatomical terminology, physiological transport, cells, tissue, skin, and the skeletal and muscular systems. Laboratory includes dissection. High school biology and chemistry with a grade of C or higher within seven years can substitute for prerequisites.
Prerequisites: BIO 4073; CHE 2200, or CHE 2202 and CHE 2203. Minimum grade C for all, or high school biology and/or chemistry (minimum grade C) within seven years.

4015 Anatomy and Physiology 2 3-2-4
A continuation of BIO 4014. Topics include: nervous system, special senses, endocrine system, blood, and the cardiovascular system. Laboratory includes dissection.
Prerequisites: BIO 4014 (minimum grade C).

4016 Anatomy and Physiology 3 3-2-4
A continuation of BIO 4015. Topics include: respiratory system, gastrointestinal system, metabolism, renal system, fluids and electrolytes, acid-base balance, reproduction, and immune system. Laboratory includes dissection.
Prerequisites: BIO 4015 (minimum grade C).

4018 Pharmacology 3-0-3
An introduction to clinical drug therapy, categories, and adverse reactions. Topics include: principles of drug therapy, pharmacokinetics, pharmacodynamics, drug classes and schedules, drug approval and regulation, modes of administration, and for major drug classes, indications, mechanism of action, and adverse effects.
Prerequisites: BIO 4016 (minimum grade C).

4019 Cross Sectional Anatomy 2-2-3
An introduction to the sectional anatomy of major human structures. Topics include: anatomy of the head, neck, thorax, and abdominal-pelvic regions; and organ relationships in the axial, coronal, and sagittal planes.
Prerequisites: BIO 4016 (minimum grade C).

4020 Fundamentals of Pathophysiology 5-0-5
An introduction to basic disease processes. Topics include: necrosis, inflammation, repair, developmental abnormalities, neoplasia, immune disorders, infectious disease, and the pathogenesis of representative diseases in each category.
Prerequisites: BIO 4016 (minimum grade C) or equivalent.

4021 Fundamentals of Pharmacology 1 2-0-2
An examination of clinical drug therapy, categories, and adverse reactions. Topics include: terminology, immunizing agents, narcotics/non-narcotics, NSAIDs, antianxiety, sedatives/hypnotics, antineoplastics, corticosteroids, respiratory, cardiovascular, gastrointestinal, anticoagulants, thrombolytics, and antilipemic agents.
Prerequisites: BIO 4016 (minimum grade C).

4022 Fundamentals of Pharmacology 2 2-0-2
A continuation of BIO 4021. Topics include: antiinfectives and antimicrobial, endocrine, ophthalmic, antiparkinson, anticonvulsant, antidepressant, antipsychotic agents and autonomic nervous system drugs. Completion of BIO 4021 and BIO 4022 is equivalent to BIO 4018.
Prerequisites: BIO 4021 (minimum grade C).

4071 Concepts of Biology 1 3-2-4
An introduction to basic biology principles from the molecular to the cellular level. Laboratory sessions reinforce lecture topics. For non-biology majors fulfilling a science requirement or for those who need to meet anatomy and physiology prerequisites.
Prerequisites: DE 0024, DE 0011, DE 0005 or appropriate placement test scores.

BIO Biology
BPI Industrial Maintenance

4072 Concepts of Biology 2 **3-2-4**
A continuation of BIO 4071. Topics include: the molecular biology of the gene, plant form and function, the animal kingdom, evolution, and ecology. Laboratory experiences include field trips to Krohn Conservatory and the Cincinnati Zoo.
Prerequisites: BIO 4071 (minimum grade C).

4073 Concepts of Biology 3 **3-2-4**
Topics include: the anatomy and physiology of animals, emphasizing human organ systems. Includes laboratory dissection of the fetal pig.
Prerequisites: BIO 4071 (minimum grade C) or advisor consent and appropriate placement test reading scores.

4074 Human Disease **3-0-3**
An overview of disease in the human body. Topics include: principles of disease and diseases of the various organ systems.
Prerequisites: BIO 4073 (minimum grade C) or instructor consent.

4075 Foundations of Exercise Science **3-2-4**
An introduction to the human body's response and adaptation to exercise and physical training. Laboratory experiences include testing and measurement related to exercise and fitness.
Prerequisites: BIO 4073 (minimum grade C).

4076 Human Genetics **3-0-3**
An overview of the field of genetics as it pertains to humans. Topics include: DNA structure, meiosis, karyotypes, patterns of inheritance, genetic engineering, and societal implications of an individual's genetic identity.
Prerequisites: BIO 4073, BIO 4083, BIO 4014, or high school biology within the last seven years (minimum grade C for all).

4081 Biology 1 **3-4-5**
An introduction to basic biological principles. Topics include: the chemistry of life, cell structure, metabolism, and the molecular basis of reproduction and inheritance. Laboratory sessions emphasize experimental design and critical thinking. For Associate of Science or pre-professional students wishing to transfer as biology majors.
Prerequisites: BIO 4071 or high school biology (minimum grade C) within seven years; DE 0011 or appropriate placement test score.

4082 Biology 2 **3-4-5**
A continuation of BIO 4081. Topics include: major animal phyla and their taxonomic and evolutionary relationships and animal organ systems emphasizing comparative strategies. Laboratory sessions include animal dissections. For Associate of Science or pre-professional students wishing to transfer as biology majors.
Prerequisites: BIO 4081.

4083 Biology 3 **3-4-5**
A continuation of BIO 4082. Topics include: the major plant divisions within the evolutionary context of adaptation to terrestrial environments, classical genetics, and ecology. Laboratory sessions reinforce lecture topics. For Associate of Science or pre-professional students wishing to transfer as biology majors.
Prerequisites: BIO 4082.

4092 Cell Biology **3-4-5**
An in-depth study of the workings of the cell. Topics include: cell structure and organelles, protein structure and function, membranes, cellular respiration, intracellular transport, cell to cell communication, and the cell cycle.
Prerequisites: BIO 4083 and CHE 2231 or CHE 2253 (minimum grade C for all).

4093 Genetics **3-4-5**
A course that explores the mechanisms of heredity and genetics. Topics include: DNA and chromosome structure; transcription and gene regulation; replication and cell division; patterns of inheritance; genetic recombination; mutations and their repair; and the genetics of cancer, development, and evolution.
Prerequisites: BIO 4083 and CHE 2231 or CHE 2253 (minimum grade C for all).

4095 Environmental Science **3-4-5**
A course on the interrelationships between organisms and their natural environments. Topics include: individual, population, and community interactions. Laboratory sessions introduce techniques for the analysis of aquatic and terrestrial ecosystems.
Prerequisites: BIO 4083 (minimum grade C) or instructor consent.

4099 Special Topics in Biology **Var-Var-Var**
An academic pursuit pertaining to biology and mutually agreed upon by the student and faculty member. Students receive grades of S or U for this course.
Prerequisites: None.

BIOT Biotechnology

4091 Basic Techniques for Biotechnology **2-3-3**
An introduction to the techniques used in a biological laboratory. Topics include: safety procedures, using lab instrumentation, preparing solutions, quality control, aseptic technique, and lab documentation practices.
Prerequisites: BIO 4071 or high school biology within seven years; CHE 2231, CHE 2203, or high school chemistry within seven years (minimum grade C for all); appropriate placement test scores.

4094 Protein Analysis for Biotechnology **2-4-4**
A course on techniques used to isolate, analyze, and test proteins. Topics include: protein isolation and purification, gel electrophoresis, Western blot and ELISA, and proteomics.
Prerequisites: BIOT 4091 and BIO 4071 or BIO 4081 (minimum grade C for both).

4096 Advanced Techniques for Biotechnology **2-4-4**
A course on advanced laboratory procedures for use in a biotechnology setting. Topics include: genetic engineering and transformation, electrophoresis, blotting, PCR, genomics, and proteomics.
Prerequisites: BIOT 4091 and BIO 4071 or BIO 4081 (minimum grade C for both).

4097 Biotechnology Capstone Project **0-4-2**
A capstone course in biotechnology. Students complete a project on a topic chosen in partnership with the instructor.
Prerequisites: BIOT 4094, BIOT 4096 (minimum grade C for both).

9373 Cooperative Education-Biotechnology **1-20-2**
Biotechnology students participate in a part-time paid learning experience while completing other program requirements. Students must adhere to the Health and Public Safety Division Student Handbook and program requirements.
Prerequisites: BIOT 4094 or BIOT 4096, COMM 1024, ENG 1010 (minimum grade C for all).

BLD Civil Engineering Technology

7099 Building Technology Studies **45-0-45**
Individual study and special projects pertaining to the student's area of concentration. This course is open to students wishing advanced standing or independent study.
Prerequisites: None.

BMT Biomedical Engineering Technology

7739 Introduction to Biomedical Information Systems and Technology **2-3-3**
A survey of Biomedical Engineering Technology and the role of the BMET in the hospital. Topics include: organization of the hospital, regulations, professional certifications, registrations, ethics, and professionalism. Students must have a basic knowledge of Microsoft Word, Excel, and PowerPoint prior to entering this class.
Prerequisites: MAT 1161 or appropriate placement test score.

7749 Biomedical Instrumentation 1 **3-5-5**
A survey of the field of Biomedical Engineering Technology and the role of the BMET in the hospital. Topics include: organization of the hospital, regulations, professional certifications, registrations, ethics, and professionalism. Students use computers as biomedical department tools.
Prerequisites: BIO 4073, EET 7730, CPET 7738, BMT 7739.

7759 Biomedical Instrumentation 2 **3-5-5**
A continuation of BMT 7749, covering more complex, specialized medical devices. Topics include: advanced equipment malfunction isolation and test instrumentations; maintenance management such as records, stock level optimization, shop layout, forms, and technician duties; and biomedical equipment servicing ethics.
Prerequisites: BMT 7749.

BPI Industrial Maintenance

1010 BPI Building Analyst Professional **2-2-3**
A training course for individuals seeking to become a certified BPI Building Analyst Professional, qualified to conduct whole-house energy audits. Topics include: building science, buildings and their systems, measurement and verification of building performance, BPI Standards, and analyzing building systems.
Prerequisites: None.

1020 BPI Envelope Professional 2-2-3
A training course for individuals seeking to become a certified BPI Envelope Professional. Topics include: BPI standards; analyzing building systems; envelope systems and interaction with other building systems; and optimizing the installation, operation, and maintenance of envelope systems.
Prerequisites: None.

BT Business

9200 Professional Practices 1-0-1
A course that prepares students for the cooperative education interview process, heightens student awareness of work ethics, and provides skills that ensure professional success.
Prerequisites: None.

9202 Student Success and Career Development 3-0-3
A course on skills for students preparing to enter the workforce. Topics include: creating resumes, developing strategies for job search and interviews, and developing skills for job productivity and career success.
Prerequisites: None.

BUS Business

1999 Special Problems Seminar Var-Var-Var
Individual study and special projects pertaining to the particular technology in which the student is enrolled. Open to fourth and fifth term students by special arrangement with the coordinator and Dean of Business Technologies.
Prerequisites: None.

2925 Business Principles 3-0-3
A course on the nature of business. Topics include: forms of business ownership, entrepreneurship, principles in finance, global business, management, marketing, ethics, and union-management relations.
Prerequisites: None.

2973 Business Ethics 3-0-3
An introduction to business ethics. Topics include: truth-in-advertising, whistleblowing, environmental protection, corporate disclosure, discrimination, finance and banking, computer crime, and workers' rights.
Prerequisites: None.

3094 Workshops in Business Var-Var-Var
Consideration and study of selected issues and topics in the business technologies area designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

9222 Cooperative Education - Business Management/Marketing Management 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to a business program, 2.0 minimum GPA.

9230 Cooperative Education Seminar 1 3-0-3
An alternative to participating in the cooperative education program. This course gives students an opportunity to enhance their employment options in their chosen field. Students must attain a grade of C or higher to pass this course.
Prerequisites: Co-op coordinator consent.

9231 Cooperative Education Seminar 2 3-0-3
An alternative to participating in the cooperative education program. This course gives students an opportunity to enhance their employment options in their chosen field. Students must attain a grade of C or higher to pass this course.
Prerequisites: Co-op coordinator consent.

9232 Cooperative Education Seminar 3 4-0-4
An alternative to participating in the cooperative education program. This course gives students an opportunity to enhance their employment options in their chosen field. Students must attain a grade of C or higher to pass this course.
Prerequisites: Co-op coordinator consent.

9233 Business Competencies 2-0-2
A capstone course that helps students develop business competencies and skill sets. Topics include: graduate job search, negotiations, customer service, professional ethics, public service, and cultural diversity. Students complete community service and a portfolio project. Students must earn a grade of C or higher to pass the course.
Prerequisites: BT 9200, all co-op credit hours required by program and/or co-op seminars or co-op coordinator consent.

9242 Cooperative Education - Business/Marketing Management-Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to program, 2.0 minimum GPA.

CAR Career Development

9014 College Study Skills 4-0-4
A comprehensive course for students who would like to get the most out of their studies. Topics include: developing positive attitudes toward good study habits and improving basic study skills such as note-taking, memory, and preparing for examinations.
Prerequisites: None.

9015 Math Anxiety Study Skills 1-1-1
Math anxiety strategies for a nontraditional math program. Topics include: incorporating facets of self-awareness, self-improvement, and appropriate math study skills.
Prerequisites: None.

CET Civil Engineering Technology

7020 Safety Training Module 1-0-1
The fundamentals of safety methods delivered in standard construction training workshops. Specific workshops must be approved by program chair.
Prerequisites: None.

7024 Architectural Drafting 3-4-4
An introduction to architectural drafting concepts. Topics include: preparing residential working drawings; architectural symbols, details, abbreviations and dimensioning methods; and an overview of building codes. Students investigate the four major building materials used in construction: steel, concrete, wood, and masonry.
Prerequisites: None.

7025 Site Drafting 2-3-3
An introduction to surveying drafting. Topics include: contour maps from field notes, cross sections, grading plans, volume calculations, deed abstracts, boundary plats, and building permit drawings. Students should complete MAT 1171 prior to or concurrently with this course.
Prerequisites: CET 7910.

7026 Architectural Design 2-5-4
A continuation of CET 7024. Topics include: the detail and information required in a complete professional set of architectural working drawings and designing a set of architectural working drawings for an office building. Students use special CAD design software to facilitate the design process.
Prerequisites: CET 7024, CET 7927, CET 7926.

7070 Introduction to LEED Requirements 1-0-1
An introduction to LEED requirements for the building industry.
Prerequisites: None.

7071 LEED Specifications 1-0-1
An introduction to LEED specifications and their impact on the building process.
Prerequisites: None.

7072 LEED Building Materials 1 1-0-1
An introduction to sustainable building materials and their use.
Prerequisites: None.

7073 LEED Building Materials 2 1-0-1
A continuation of CET 7072. Topics include: recycling material, use of regional materials, rapidly renewable materials, use of certified wood, and the certification process.
Prerequisites: CET 7072.

CET Civil Engineering Technology

7074 LEED Indoor Air Quality 1 **1-0-1**
A course that introduces indoor air quality requirements during the building process. Topics include: indoor air quality measurement, low emitting materials, and the impact of construction phases on indoor air quality.
Prerequisites: None.

7075 LEED Indoor Air Quality 2 **1-0-1**
A continuation of CET 7074. Topics include: air quality measurement and documentation.
Prerequisites: CET 7074.

7076 LEED Indoor Air Quality 3 **1-0-1**
A continuation of CET 7075. Topics include: indoor air quality measurement and documentation during the building pre-occupancy.
Prerequisites: CET 7075.

7077 LEED Sustainable Sites **1-0-1**
An introduction to LEED sustainable site requirements.
Prerequisites: None.

7078 LEED Brownfield Requirements **1-0-1**
A course on managing Brownfield building projects. Topic include: EPA and LEED requirements.
Prerequisites: CET 7077.

7079 LEED and Commissioning Requirements **1-0-1**
A course on the requirements and documentation of commissioning in the building industry.
Prerequisites: None.

7080 The LEED Rating System **1-0-1**
An introduction to the LEED rating system and point maximization.
Prerequisites: None.

7081 LEED Project Bidding **1-0-1**
A course on bidding a LEED building project. Topics include: Understanding and managing key cost components during construction.
Prerequisites: None.

7082 LEED Impact on the Building Industry **1-0-1**
A course on how the LEED process can decrease building costs and improve customer satisfaction.
Prerequisites: None.

7910 Surveying Measurements **3-2-4**
An introduction to field measurement techniques. Topics include: units, field note format, instrument usage, taping, differential leveling, total station use including horizontal and vertical angles, bearing and azimuths, and construction layout including an introduction to GPS.
Prerequisites: MAT 1162 or appropriate placement test score.

7913 Introduction to Civil Engineering Technologies **0-2-1**
An introduction and orientation to the Civil Engineering Technology program and to the CET profession with an emphasis on cooperative education.
Prerequisites: None.

7914 Civil Computer Applications **1-2-2**
An introduction to computer applications within the Civil Engineering Technology field. Students use word processing, spreadsheet, and presentation software as it relates to their career field.
Prerequisites: None.

7915 OSHA 10-Hour Construction Safety **0-2-1**
An overview of key OSHA Construction Industry Safety Standards and basic principles of construction safety. Students receive an OSHA Certificate upon successful completion. Topics include: interpreting applicable OSHA regulations; fall protection; excavations; electrical safety; and key elements of hazardous material handling. CET students must successfully complete this course during their first co-op term.
Prerequisites: None.

7920 Surveying Calculations **2-3-3**
A course on the problem-solving calculations central to all surveying topics. Topics include: traverse closure, area, and coordinate calculations. Includes both manual and computer solutions.
Prerequisites: CET 7910.

7921 Construction Surveying **2-3-3**
A course on fundamental construction layout principles required for typical construction projects. Topics include: basic control networks; coordinate systems and coordinate geometry; alignment and grade for structures, roadway, and utilities; data collector use; and RTK GPS data acquisition, positioning, and mapping.
Prerequisites: CET 7910.

7926 Building Codes **1-3-2**
An introduction to building code requirements. Topics include: the Ohio building codes, mechanical, electrical, and plumbing codes as they apply to designing and constructing building projects.
Prerequisites: CET 7024.

7927 CAD 1 (CET) **2-3-3**
A continuation of CET 7935. Topics include: CAD drawing, modifying and dimensioning commands as they apply to civil engineering drawings, and other CAD techniques such as paper space, model space, blocks, and attributes.
Prerequisites: CET 7935.

7928 CAD 2 (CET) **1-6-3**
A continuation of CET 7927. Topics include: isometric and three-dimensional drawing techniques, and surfacing. Students use CAD design software for architectural modeling, rendering, and animation.
Prerequisites: CET 7927.

7929 3-D Modeling 1: REVIT Architecture **2-3-3**
A course on parametric 3-D building models using REVIT Architecture software. Topics include: building design and extraction of component information.
Prerequisites: CET 7927.

7930 Route Surveying **4-2-5**
A course on the elements of road and right-of-way surveying. Topics include: calculation and layout of horizontal curves, vertical curves, spiral transition curves, super-elevation, and typical sections. Includes extensive use of coordinate calculations using CAD design software in practical applications.
Prerequisites: CET 7920.

7931 Building Construction **3-2-4**
A course on how various types of buildings are assembled. Topics include: building code and zoning regulations, footing design, residential, masonry, metal buildings, tilt-up, and high-rise construction. Lab work covers soil properties and classifications.
Prerequisites: None.

7932 3-D Modeling 2: REVIT MEP **2-3-3**
A continuation of CET 7929, using REVIT MEP software. Topics include: mechanical, electrical, and plumbing building elements.
Prerequisites: CET 7929.

7934 Statics (CET) **2-3-3**
A course on the engineering analysis of forces as they are applied to structures. Topics include: force analysis and equilibrium of civil engineering structures, centroids, moment of inertia, and static friction.
Prerequisites: MAT 1191.

7935 Introduction to CAD (CET) **2-3-3**
An introduction to computer-aided drafting. Topics include: fundamentals of CAD software and GUI interaction emphasizing draw, display, modify, plot, layer, utility, and setting commands.
Prerequisites: MAT 1162 or appropriate placement test score.

7936 HVAC Design Systems **3-2-4**
A study of heating, ventilation, and air conditioning (HVAC). Topics include: heat loss and heat gain design, distribution (ductwork design), equipment selection, an introduction to controls, the effect of electrical loads on HVAC, and air quality issues.
Prerequisites: MAT 1191 or MAT 1172; or appropriate placement test score, CET 7026, CET 7927.

7940 Elements of Land Surveying 1 **3-3-4**
An advanced course on the elements of boundary surveys. Topics include: document research, deed descriptions, US public lands survey system, Ohio land subdivisions, and legal aspects of land surveys.
Prerequisites: CET 7920.

7941 Computer Integrated Construction 1-5-3
An introduction to three construction software packages. Students prepare estimates using Timberline's Precision Estimating Extended, create schedules using Primavera SureTrak Project Manager, and perform project controls with web-based Meridian ProjectTalk.
Prerequisites: CET 7943.

7942 Construction Management 1 2-3-3
An examination and comparison of project delivery systems. Topics include: advantages and disadvantages of the services of each system, drawing and calculating CPM schedules, and creating schedules for various projects.
Prerequisites: MAT 1171 or MAT 1191.

7943 Construction Estimating 2-3-3
A course on construction estimating. Topics include: quantity takeoff, types of estimates, bidding procedures, types of contracts, and selecting the contractor. Students perform a detailed manual estimate from a set of working drawings.
Prerequisites: None.

7944 Strength of Materials (CET) 3-2-4
A course on the behavior and ability of engineering materials to resist forces. Topics include: Hooke's Law, temperature effects, connection analysis, beam mechanics, shear and moment diagrams, and combined stress.
Prerequisites: CET 7934.

7945 Cost Engineering 2-3-3
A course on analyzing construction economic factors through determining cost, schedule, and productivity. Topics include: formulating and calculating unit prices and unit costs, crew mix, productivity rates, feasibility studies, buy versus rent scenarios, project cash flow, cost indices, budget status reports, true profit, and value engineering studies.
Prerequisites: CET 7943.

7946 Construction Scheduling 2-3-3
Topics include: establishing schedule activities, durations, and logic. Students manually draw and calculate CPM schedules.
Prerequisites: None.

7947 Drainage Control Systems 3-2-4
An introductory course on designing drainage systems for storm runoff removal. Topics include: analyzing hydrologic problems by the Rational Method, hydrology, detention systems, storm sewers, open channels, culverts, and erosion control principles emphasizing practical application.
Prerequisites: CET 7927.

7948 Subdivision Design 1 2-3-3
An introduction to residential subdivision design. Topics include: general zoning and subdivision regulations such as lot, street, and easement design. Labs use CAD design software.
Prerequisites: CET 7025, CET 7930.

7949 Geographic Information Systems 1 3-2-4
A introductory course on geographic information systems. Topics include: GIS terminology, data acquisition, and applications. Students use IDRIS and ESRI software in lab.
Prerequisites: CET 7935.
Corequisites: CET 7940.

7950 Surveying Field Project 1-6-3
Specialized project using fundamental theories and standard practices involved in surveying. Topics include: courthouse research, field reconnaissance and measurement, resolution, computer mapping, platting, and legal description writing.
Prerequisites: CET 7940.
Corequisites: CET 7958.

7951 Surveying History: OH, IN, KY 3-0-3
An advanced course in survey history and the development of the United States Public Land Survey System. Topics include specific surveying developments and methods used in these states. Discussion will use Original Ohio Land Subdivisions and Indiana Trails and Surveys.
Prerequisites: Admitted to Land Surveying certificate.

7952 Topics in Professional Surveying 1-0-1
A survey course on contemporary technological, legal, and business issues in the surveying profession.
Prerequisites: None.

7953 Construction Management 2 2-4-4
The capstone course for the construction management major. Students draw upon and integrate knowledge from previous courses into a detailed oral and written construction management project proposal. Discussion topics include: construction safety, construction law, and ethics in the construction industry.
Prerequisites: CET 7941.

7954 Reinforced Concrete Design 3-2-4
A course on the theory and design process for common reinforced concrete members. Topics include: designing flexural and shear reinforcing in beams, designing columns using the ACI ultimate strength design method, standard testing procedures, and the properties of concrete as a structural material.
Prerequisites: CET 7944.

7955 Building Information Models (BIM) 3-2-4
A course on commercial construction methods, materials, and building information models. Topics include: structural framing techniques/issues, building and closure issues, and other common interference issues that arise during construction. Laboratory projects investigate interference resolution as well soil as laboratory test.
Prerequisites: CET 7927, CET 7944.

7956 Structural Steel Design 3-2-4
A course covering the theory and design process for common steel members. Topics include: tension member design, column behavior and design, and simple beam design. All design conforms to LRFD per current AISC specifications. Labs utilize structural modeling and analysis software.
Prerequisites: CET 7934, CET 7944.

7958 Control Surveying 1-6-3
An introduction to control surveying. Topics include: basic geodesy, state plane coordinate calculations, vertical control, satellite positioning, and network adjustment. Students observe and adjust a horizontal control network with total stations and GPS equipment.
Prerequisites: CET 7930.

7959 Subdivision Design 2 2-3-3
A continuation of CET 7948. Topics include: road profiles, cross-sections, sanitary and storm sewer systems, potable water systems, final grading plans, earthwork calculations, and final record plats. All plans use CAD design software for drawing and design.
Prerequisites: CET 7930, CET 7947, CET 7948.

7960 Architectural Design for LEED Certification 3-2-4
A course on LEED criteria that require architectural consideration in designing new buildings. Topics include: modifying basic designs to meet LEED criteria, using low-energy-emitting materials, applying appropriate water and energy design practices, and using renewable and regional materials.
Prerequisites: CET 7983, CET 7984, CET 7986.

7961 Commissioning and Decommissioning Building Systems 3-2-4
A course on appropriate techniques for bringing building premises, equipment, installations, and services into or out of operational use. Topics include: life cycle evaluations, installing non-energy management systems, preparing documentation, and maximizing material reuse.
Prerequisites: CET 7988.

7962 Commissioning Energy Management Systems 3-2-4
A course on appropriate techniques for bringing building energy management systems into operational use. Topics include: measurement and verification, fundamental refrigerant management, and government requirements for energy performance.
Prerequisites: CET 7960.

7963 Electrical Design Systems 3-2-4
A study of electrical systems in buildings. Topics include: introduction to electrical theory emphasizing design applications, power distribution (both single and three phase), simple single-lines, equipment selection, lighting protection, safety issues, and effect of electrical loads on HVAC calculations.
Prerequisites: MAT 1191, MAT 1172, or appropriate placement test score; CET 7026, CET 7927.

7964 Mechanical Systems 2-3-3
A study of various mechanical systems used in buildings. Topics include: water and waste systems (plumbing isometrics), fire protection, acoustics, mechanical devices such as chillers and air dryers, building management systems, and the characteristics of air as an introduction to HVAC.
Prerequisites: MAT 1191, MAT 1172, or appropriate placement test score; CET 7026, CET 7927.

7967 Energy Modeling of Buildings 3-2-4
A course on creating an energy model of an existing or new building. Topics include: selecting and using appropriate software, translating design criteria, and interpreting energy model results.
Prerequisites: CET 7960.

7968 Lighting Systems 2-3-3
A course on light sources and lighting design concepts. Topics include: illumination, foot-candles, and surface reflectance, and how these relate to room lighting; lighting calculations; appropriate luminaire selection; cost estimating; and outdoor lighting. Course work includes technical writing and a professional presentation.
Prerequisites: MAT 1191, MAT 1172, or appropriate placement test score; CET 7026, CET 7927.

7969 Building Systems Design 3-5-5
Students perform a building design integrating all architectural, mechanical, electrical, plumbing, and acoustical systems into a predetermined space. Topics include: zoning, building codes, ADA requirements, pipe sizing, equipment selection, power distribution, lighting design, and water and waste systems.
Prerequisites: CET 7964, CET 7968, and CET 7929. Students must be registered for or have previously taken CET 7936, and CET 7963.

7970 Management of Construction Projects for LEED Certification 3-2-4
A course on interpreting and applying the LEED certification requirements related to the design and construction of new buildings. Topics include: LEED certification levels and LEED points assignment processes.
Prerequisites: CET 7962.

7971 Construction Health & Safety 1 3-0-3
An introductory course on construction safety management. Topics include: risk management, the Code of Federal Regulations, and OSHA Construction Industry Standards as outlined in Federal Code 29 CFR Part 1926.
Prerequisites: None.

7972 Construction Health & Safety 2 3-0-3
A continuation of CET 7971. Topics include: the health and safety hazards inherent to the construction industry and continued study of the OSHA Construction Industry Standards as outlined in Federal Code 29 CFR Part 1926.
Prerequisites: None.

7973 Construction Risk Management & Insurance 1 3-0-3
A course on insurance issues related to the construction management process. Topics include: financial risk planning, risk management, insurance markets, property insurance, and contractual risks.
Prerequisites: None.

7974 Construction Safety Plan Management 3-0-3
A course on developing construction safety plans. Topics include: essential elements of a safety program, best practices, legal and regulatory requirements related to safety planning, substance abuse programs, accident investigations, contractor management, and crisis management and planning.
Prerequisites: None.

7975 Environmental Issues in Construction 3-0-3
A course on environmental concerns that affect construction activities. Topics include: storm water pollution prevention plans, asbestos abatement, disturbance and abatement of lead-containing materials, silica exposure, and OSHA and EPA regulations related to construction.
Prerequisites: None.

7976 Construction Safety Law 4-0-4
A course that provides an overview of legal issues that affect construction site and project operations. Topics include: basic legal terms, multi-employer worksite rules, using intentional torts, violation of specific safety requirements, and union contracts.
Prerequisites: None.

7977 Construction Risk Management & Insurance 3-0-3
A course on methods of risk management in the construction field. Topics include: forms of liability insurance (commercial, employers, environmental, management, and professional), workers' compensation, and contractual risk transfer.
Prerequisites: None.

7980 Preparing for the LEED Accredited Professional Exam 3-0-3
A course that prepares students for the LEED Accredited Professional certification exam. Topics include: typical exam questions and privileges and responsibilities of the LEED Accredited Professional.
Prerequisites: Instructor consent.

7981 Geographic Information Systems 2 3-2-4
A continuation of CET 7949. Students build on basic concepts of spatial data and explore advanced concepts of data creation, manipulation, query, analysis, and map presentation using state-of-the art software.
Prerequisites: Admitted to Advanced Surveying Certificate program, or program chair consent.

7982 Global Positioning Systems for Surveying 4-0-4
A course on the global positioning system for surveying using both static and real-time kinematic positioning. Topics include: mission planning, GPS observation, and data collection and processing.
Prerequisites: Admitted to the ASC program or program chair consent.

7983 Sustainable Design in HVAC Systems 3-2-4
A course on technical components of designing and implementing an HVAC system that meets ASHRAE 90 requirements. Topics include: understanding ASHRAE 90 requirements, assessing glazing capabilities, applying sustainability principles, and minimizing energy use.
Prerequisites: Admitted to CETSDC program.

7984 Sustainable Design in Lighting Systems 2-3-3
A course on technical components of designing and implementing an energy-efficient lighting system. Topics include: light harvesting, dimming techniques, minimizing outdoor light pollution, applying sustainability principles, and minimizing energy use.
Prerequisites: Admitted to CETSDC program.

7985 Alternative Energy Sources 2-3-3
A course on evaluating and implementing alternative energy sources such as geothermal, wind, and photovoltaic (solar) energy for use in building design projects.
Prerequisites: Admitted to CETSDC program.

7986 Sustainable Site Design 2-3-3
A course on designing sustainable building sites. Topics include: assessing prior construction and brownfield concerns, assessing water concerns, reducing impact on natural habitat and existing species, and reducing heat-island impact.
Prerequisites: CET 7985.

7987 Energy Audits of Existing Buildings 2-3-3
A course on planning and implementing energy use audits for commercial buildings. Topics include: evaluating building skin, identifying appropriate changes to reduce energy use, preparing energy audit reports, and using energy audit software.
Prerequisites: Admitted to CETSDC program.

7988 Construction Practices for LEED Certification 3-2-4
A course on LEED requirements for new building construction projects. Topics include: understanding the LEED requirements, construction waste management, using regional materials, and reusing materials during the construction process.
Prerequisites: Admitted to CETSDC program.

7989 Facilities Management for LEED Certification 3-2-4
A course on LEED requirements for facilities management. Topics include: continuous waste management, alternative energy management, recycling, and continuous use of regional materials.
Prerequisites: Admitted to CETSDC program.

7990 Advanced Survey Calculations 3-2-4
An advanced course on survey calculations. Topics include: coordinate geometry review, advanced coordinate geometry methods, least squares adjustment, and error theory.
Prerequisites: CET 7994.

7991 Elements of Land Surveying 2 3-3-4
A continuation of CET 7940. Topics include: legal descriptions, easements, riparian rights, ALTA surveys, U.S. Public Land Survey System surveys, and state-specific surveying laws in Ohio, Kentucky, and Indiana.
Prerequisites: CET 7940.

7992 Elements of Land Surveying 3 3-2-4
An advanced course on boundary surveying. Topics include: U.S. Public Land Survey System and colonial surveying methods, legal descriptions, and plat preparation. Students work in state plane coordinates and use case studies.
Prerequisites: Admitted to Advanced Surveying Certificate program, or program chair consent.

7993 Surveying Laws and Ethics 3-0-3
A course on state-specific surveying laws from Ohio, Kentucky, and Indiana. Topics include: key historic cases relating to boundary locations and ethics specific to the surveying profession.
Prerequisites: Admitted to Advanced Surveying Certificate program, or program chair consent.

7994 Statistics for Surveying Applications 3-0-3
An introductory course on statistics used in surveying measurements and civil engineering technology. Topics include: random error propagation and point estimation on data from differential leveling, boundary closure, and control networks.
Prerequisites: Admitted to Advanced Surveying Certificate program.

7999 Special Problems Seminar - Civil Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College, or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair.
Prerequisites: Program chair consent.

CHE Chemistry

2202 Introductory Chemistry 1 4-2-5
An introductory chemistry course. Topics include: metric system properties, structure, formulas, bonding, equation writing and balancing, and stoichiometry. The course includes laboratory activities.
Prerequisites: DE 0011, MAT 1105, or appropriate placement test score.

2203 Introductory Chemistry 2 4-2-5
A continuation of CHE 2202. Topics include: gas laws, solution chemistry, liquid and solid states, acids, bases, salts, chemical kinetics, and chemical equilibrium. The course involves lectures with laboratory activities.
Prerequisites: CHE 2202 (minimum grade C).

2204 Integrated Chemistry and Science Mathematics 1 6-2-7
An integrated introductory chemistry and applied science mathematics course. Topics include: metric system conversion, using dimensional analysis for algebraic manipulation and problem solving, chemical properties, structure, formulas, bonding, equation writing and balancing and stoichiometry.
Prerequisites: DE 0024 or appropriate placement test score.

2205 Integrated Chemistry and Science Mathematics 2 6-2-7
A continuation of Integrated Chemistry and Science Math 1. Chemistry topics include: gas laws, solution chemistry, liquid and solid states, acids, bases, salts, chemical kinetics, and chemical equilibrium. Math topics include: further development of dimensional analysis, pH & pOH calculation, equilibrium, gas law and solution calculations.
Prerequisites: CHE 2204.

2231 Fundamentals of General Chemistry 3-3-4
A course on college-level general chemistry. Topics include: structure and properties of matter, changes in matter, chemical bonding, chemical reactions, and equilibrium.
Prerequisites: High school chemistry (minimum grade C), CHE 2200, or CHE 2203 within three years; MAT 1171; or appropriate placement or CHE pre-test score.

2232 Fundamentals of Organic Chemistry 3-3-4
A course on college-level organic chemistry as a foundation for biochemistry. Topics include: carbon bonding, saturated and unsaturated aromatic hydrocarbons, alcohols, phenols, aldehydes, ketones, acids, and amines.
Prerequisites: High school chemistry (minimum grade C), or CHE 2200 or CHE 2203 or CHE 2231 within three years.

2233 Fundamentals of Biochemistry 3-3-4
A course on college-level biochemistry. Topics include: carbohydrates, amino acids, proteins, lipids, vitamins, enzymes, and metabolism of body fluids.
Prerequisites: CHE 2232 (minimum grade C).

2236 Physiological Chemistry 3-3-4
An introduction to physiological chemistry for the health professional. Topics include: basic organic concepts such as types of organic compounds, functional groups, and basic organic reactions; carbohydrates; proteins; lipids; nucleic acids; and metabolic cycles. It is strongly recommended that students take CHE 2231 before this course.
Prerequisites: High school chemistry (minimum grade C), or CHE 2200 or CHE 2203 within three years.

2251 Freshman Chemistry 1 4-3-5
A general chemistry course emphasizing chemical analysis techniques. Topics include: measurement systems, quantitative aspects of compounds and mixtures, chemical reactions and their quantitative relationships, atomic theory, chemical bonding, and thermochemistry. Laboratory exercises emphasize non-instrumental separation techniques, gravimetric analysis, solution preparation, and analysis by visible spectroscopy.
Prerequisites: High school chemistry (minimum grade C), CHE 2200 or CHE 2203 within three years, and MAT 1151 or appropriate placement test score.

2252 Freshman Chemistry 2 4-3-5
A continuation of CHE 2251. Topics include: kinetic molecular theory of gases, liquids, and solids; solution chemistry; kinetics; and equilibrium. Laboratory exercises emphasize solution preparation and volumetric titrations.
Prerequisites: CHE 2251.

2253 Freshman Chemistry 3 4-3-5
A continuation of CHE 2252. Topics include: acid-base equilibrium, solubility equilibrium, thermodynamics, and electrochemistry.
Prerequisites: CHE 2252 or CMT 6621.

2281 Organic Chemistry 1 3-0-3
A course on principles of carbon chemistry. Topics include: bonding, structure, mechanisms, properties, reactions, and synthesis; and aliphatic and aromatic hydrocarbons.
Prerequisites: CMT 6631 or CHE 2253 (minimum grade C).
Corequisites: CHE 2284.

2282 Organic Chemistry 2 3-0-3
A continuation of CHE 2281. Topics include: alcohols, alkyl halides, ethers, thiois, aldehydes, and ketones; simple synthesis and analysis; and determination of purity.
Prerequisites: CHE 2281 (minimum grade C), CHE 2284.
Corequisites: CHE 2285.

2283 Organic Chemistry 3 3-0-3
A continuation of CHE 2282. Topics include: organic acids and their derivatives and amines; and stereochemistry, spectroscopy, and complex mechanisms.
Prerequisites: CHE 2282 (minimum grade C), CHE 2285.
Corequisites: CHE 2286.

2284 Organic Chemistry Laboratory 1 0-4-2
A laboratory course that accompanies CHE 2281. Laboratory experiences include: general organic laboratory techniques, especially those of purification of organic compounds.
Prerequisites: CHE 2253 or CMT 6631 (minimum grade C), or advisor consent.
Corequisites: CHE 2281.

2285 Organic Chemistry Laboratory 2 0-4-2
A laboratory course that accompanies CHE 2282. Laboratory experiences include: simple synthesis and analysis, determination of purity, and classical and instrumental techniques.
Prerequisites: CHE 2281 (minimum grade C), CHE 2284.
Corequisites: CHE 2282.

2286 Organic Chemistry Laboratory 3 0-4-2
A laboratory course that accompanies CHE 2283. Laboratory topics include: multi-step synthesis, spectrophotometric analysis, and determination of unknowns.
Prerequisites: CHE 2282 (minimum grade C), CHE 2285.
Corequisites: CHE 2283.

CHE Chemistry
CLT Clinical Laboratory Technology

2298 Special Problems in Chemistry Var-Var-Var
A course in special problems in chemistry related to the student's field of study.
Prerequisites: None.

2299 Special Topics in Chemistry Var-Var-Var
An independent academic pursuit related to the student's field of study, mutually agreed upon by the student and supervising faculty member. The Dean of Humanities and Sciences must approve the plan of study prior to registration.
Prerequisites: None.

CHW Community Health Worker

4825 Community Health Worker 1 3-5-5
An introduction to specific community health worker settings, applying concepts defined by the Ohio Board of Nursing Community Health Worker Program. Topics include: health data collection, basic anatomy and physiology, basic medical terminology, problem-solving techniques, communication in the client setting, CHW roles and responsibilities, confidentiality, community advocacy and referral, documentation, and reporting. Includes a clinical component where students practice in a community setting.
Prerequisites: None.

4827 Community Health Worker 2 3-5-5
A continuation of CHW 4826. Topics include: health care in adults, geriatric special populations, safety for the home visitor, pregnancy and childbearing, neonatal/pediatric special populations, family planning, health education, development across the lifespan, geriatric special populations, and community health issues related to caregivers across the lifespan. Labs are conducted in a community clinical setting.
Prerequisites: CHW 4826, MCH 4805 (minimum grade C for both), EMS 4732 or equivalent.

4828 Community Health Worker Practicum and Seminar 1-8-3
Clinical practice in a community health setting performing functions of the community health worker under supervision of faculty and preceptors. Includes an on-campus seminar.
Prerequisites: CHW 4827, MCH 4884.

CIT Center for Innovative Technologies

9400 Cooperative Education - Center for Innovative Technologies (Alternating) 1-40-2
Students participate in a full-time (minimum of 36 hours per week) paid field learning experience. This experience relates to the student's academic discipline and career goals by providing an opportunity to acquire appropriate knowledge and skills associated with that discipline. Students must adhere to the Center for Innovative Technologies Division's cooperative education policies and procedures.
Prerequisites: Full-time status; admitted to a CIT program; 2.0 minimum GPA.

9401 Cooperative Education - Center for Innovative Technologies (Parallel) 1-20-1
Students participate in a paid field learning experience directly related to the program discipline for 15 to 30 hours per week, while registered for a minimum of 8 credit hours of program course requirements during that same term. Students must adhere to the Center for Innovative Technologies Division cooperative education policies and procedures.
Prerequisites: Admitted to a CIT program, 2.0 minimum GPA.

9405 CIT - Service Learning 1-20-1
Students participate in an unpaid community service project for 15 to 30 hours per week that is integrated with their academic program. Students must adhere to the Center for Innovative Technologies Division's cooperative education and service learning policies and procedures.
Prerequisites: Admitted to a CIT degree program; 2.0 minimum GPA.

CLT Clinical Laboratory Technology

4011 Microbiology Principles and Techniques 2-6-4
An introduction to microbial growth and required techniques for clinical laboratory students. Topics include: bacteriological media and isolation techniques, staining, aerobic and anaerobic microbial growth, standardized antimicrobial susceptibility testing, parasitology and mycology techniques, and introduction to identifying microorganisms.
Prerequisites: BIO 4014 (minimum grade C).
Corequisites: CLT 4024.

4023 Immunology 3-0-3
A study of the structure and function of the immune system. Topics include: antigen, antibody, lymphocytes, serology complement, immune disease, and transplant reactions.
Prerequisites: BIO 4016, CHE 2236 (minimum grade C).

4024 Immunology and Immunochemical Methods 4-3-5
A study of the structure and function of the immune system and application of immunology to laboratory science. Topics include: humoral and cell-mediated immunity, antigen-antibody reactions, enzyme immunoassay, introductory molecular biology, and diagnosis of disease.
Prerequisites: BIO 4016, CLT 4304 (minimum grade C).

4301 Basic Laboratory Techniques 2-3-3
An introduction to equipment, skills, and basic concepts in laboratory science. Topics include: laboratory safety, pipetting, dilutions, quality control, spectrophotometry, laboratory information systems and basic laboratory operations.
Prerequisites: BIO 4073, DE 0025 or appropriate placement test score, and (CHE 2203 or CHE 2200); (minimum grade C for all).

4302 Basic Hematology and Hemostasis 2-6-4
A course on the theory and practice of basic hematology and coagulation. Topics include: frequently performed diagnostic tests such as cell counts, examination of blood smears, platelet and reticulocyte counts, prothrombin times, and partial thromboplastin times.
Prerequisites: CLT 4321, CLT 4301 (minimum grade C for both).

4303 Basic Urinalysis/Body Fluids 2-3-3
A course on the physiological concepts of the formation of urine as well as its physical, chemical, and microscopic examination in the clinical laboratory. Topics include: normal renal function, pathological conditions, laboratory principles and procedures, and other body fluids of clinical significance.
Prerequisites: CLT 4301 (minimum grade C).

4304 Clinical Chemistry 3-6-5
A course on the principles and procedures used in chemical analysis of clinical specimens. Topics include: theory and procedures of routine manual and automated chemical laboratory analyses and quality control.
Prerequisites: CHE 2231, CHE 2236, CLT 4302, CLT 4303 (minimum grade C for all).
Corequisites: CLT 4317.

4305 Immunohematology 3-6-5
A study of blood banking theory and procedures. Topics include: inheritance of blood group determinants, donor procedures, routine ABO grouping and Rh typing, antibody screening and identification, and compatibility testing.
Prerequisites: CLT 4023, CLT 4024, CLT 4301 (minimum grade C for all).

4306 Clinical Microbiology 3-6-5
An advanced course on identifying microorganisms that affect human health. Topics include: specimen types; direct gram stains; and clinical significance and identification of various bacteria, parasites, fungi, and mycobacteria.
Prerequisites: BIO 4011 (minimum grade C).

4307 Hematology & Hemostasis 2 2-3-3
A continuation of CLT 4302. Topics include: abnormal hematology and hemostasis, including morphological, laboratory, and clinical features of anemias, leukemias, and other blood cell disorders; and common coagulopathies.
Prerequisites: CLT 4302 (minimum grade C).

4308 Immunochemistry 2-3-3
A course in the principles and techniques of immunochemical analysis used in clinical laboratories. Topics include: immunoelectrophoresis, enzyme-linked immunosorbent assay, serological testing, and special chemical analysis of body fluids.
Prerequisites: BIO 4023, CLT 4304 (minimum grade C).

4309 Clinical Laboratory Seminar 0-3-1
A review course that prepares CLT students for the certification exam. Topics include: review of theory and practice of laboratory procedures in all laboratory areas, including discussion of current developments in clinical laboratory science. Includes a registry-type comprehensive exam.
Prerequisites: CLT 4305, CLT 4306 (minimum grade C for both).

4310 Clinical Mycology/Parasitology 1-0-1
A study of basic technology in clinical mycology and parasitology. Topics include: specimen collection and processing, principles of identification, and recognition of common fungi and parasites.
Prerequisites: BIO 4009 (minimum grade C).

4311 Clinical Applications 1 - Hematology and Coagulation 0-6-2
On-campus laboratory practice in routine hematology and coagulation. Topics include: workload organization, computer skills, record keeping, quality control, professional behavior, and routine instrumentation maintenance and troubleshooting.
Prerequisites: CLT 4307 (minimum grade C).

4312 Clinical Applications 2 - Clinical Chemistry and Urinalysis 0-6-2
On-campus laboratory practice in performance of routine manual and automated procedures in clinical chemistry and urinalysis. Topics include: workload organization, computer skills, record keeping, quality control, professional behavior, and routine instrumentation maintenance and troubleshooting.
Prerequisites: CLT 4303, CLT 4304 (minimum grade C for both).

4313 Clinical Applications 3 - Immunohematology 0-6-2
On-campus laboratory practice in routine blood banking and serology. Topics include: workload organization, record keeping, and quality control.
Prerequisites: CLT 4303, CLT 4304 (minimum grade C).

4314 Clinical Applications 4 - Clinical Microbiology 0-6-2
On-campus laboratory experience in routine clinical microbiology procedures. Topics include: workload organization, record keeping, and quality control.
Prerequisites: CLT 4306 (minimum grade C).

4317 Instrumentation for the Clinical Laboratory 1-3-2
An introduction to principles of basic instrumentation in hematology, hemostasis, and clinical chemistry. Topics include: set-up; operation; computer-instrument interfaces; routine maintenance; and quality assurance procedures for spectrophotometers, particle counters, electrodes, chromatographs, and automated discrete analyzers.
Prerequisites: CLT 4302, CLT 4303 (minimum grade C for both).
Corequisites: CLT 4304.

4321 Introduction to Clinical Laboratory Science 1-2-1
An introduction to the Clinical Laboratory Science profession. Topics include: roles and responsibilities of Clinical Laboratory personnel, certification, licensure, accreditation, laboratory terminology, departments of the clinical laboratory, and point of care testing.
Prerequisites: None.
Corequisites: CLT 4301.

4322 Physical and Chemical Urinalysis 1-2-2
A course on the physiology of urine formation and the physical and chemical analysis of the urine in the clinical laboratory. Topics include: normal renal function, pathological conditions, and practice in manual and automated laboratory procedures.
Prerequisites: CLT 4321, CLT 4392, CLT 4393 (minimum grade C for all).

4323 Analysis of Urine Sediment and Body Fluids 1-2-2
A course on the microscopic evaluation of urine sediment and of body fluids other than urine. Topics include: identification and significance of formed elements, correlation with other tests, evaluation of other body fluids, and clinical significance.
Prerequisites: CLT 4321, CLT 4392, CLT 4393 (minimum grade C for all).
Corequisites: CLT 4322.

4340 Introduction to Phlebotomy Techniques 0-3-1
An introductory course on phlebotomy techniques. Topics include: related anatomy, collection equipment and techniques, age-related collection techniques, specimen quality criteria, professionalism, and communication. Students practice phlebotomy techniques with training arms.
Prerequisites: CLT 4304, CLT 4307, CLT 4317 (minimum grade C for all).

4350 Orientation to the Clinical Lab 0-8-1
An introductory course on the clinical laboratory setting. Topics include: skill development, problem solving, patient care and communication, and professionalism. Students perform phlebotomy under the supervision of a qualified phlebotomist.
Prerequisites: CLT 4321, CLT 4392, CLT 4340 (minimum grade C).
Corequisites: CLT 4340.

4353 Clinical Laboratory Practice 1-40-6
Students apply theories and procedures in hematology, urinalysis, and clinical chemistry in a local clinical laboratory.
Prerequisites: CLT 4311, CLT 4312, CLT 4350 (minimum grade C).

4392 Safety and Standard Precautions for Health Care Personnel 0-1-1
A basic course on safety and standard precautions for students pursuing a career in health care. Topics include: safe handling of physical, chemical, and biological hazards with emphasis on bloodborne pathogens and infection control techniques.
Prerequisites: None.

4393 Point-of-Care Laboratory Testing 1-3-2
An introductory course on laboratory tests designated as waived tests by the Clinical Laboratory Improvement Act (CLIA). Topics include: testing protocols, reagent preparation, quality control, and related laboratory equipment. Students perform representative waived tests.
Prerequisites: DE 0024 or appropriate placement test score; and (CHE 2200 or CHE 2203); and BIO 4073 (minimum grade C for all).
Corequisites: CLT 4392.

4394 Interpretation of Laboratory Value 3-0-3
A course on interpreting laboratory reports for practitioners and students in other health professions. Topics include: sample collection and analysis, and reporting and interpreting results for many of the clinical laboratory tests.
Prerequisites: None.

9374 Parallel Cooperative Education - Clinical Laboratory Technology 1-20-1
The Clinical Laboratory Technology student participates in a part-time paid field learning experience. This experience provides an opportunity to apply knowledge and skills acquired in class. The student must adhere to the Health and Public Safety Division Student Handbook and program requirements.
Prerequisites: CLT 4353 (minimum grade C), admitted to the CLT program, 2.0 minimum GPA.

CMT Chemical Technology

6611 Chemistry 1 and Quantitative Analysis 4-4-6
A course that emphasizes chemical analysis techniques. Topics include: measurement systems, quantitative aspects of compounds and chemical reactions, atomic structure, and bonding. Laboratory emphasizes separation techniques, gravimetric analysis, and solution preparation. High school chemistry or equivalent within past three years required.
Prerequisites: MAT 1171 or appropriate placement test score.

6618 Basic Practices for Chemical Laboratory Technicians 3-0-3
An introductory course for laboratory technicians. Topics include: the role of the laboratory technician in industry, laboratory safety, quality programs, regulatory and compliance policies, problem solving, basic statistics, and laboratory error.
Prerequisites: None.

6619 Computer Analysis of Laboratory Data 3-0-3
A course on the application of software as a laboratory tool for technicians. Emphasizes Excel as the data analysis package and use of Internet as a scientific literature research tool.
Prerequisites: None.

6621 Chemistry 2 and Quantitative Analysis 4-4-6
A continuation of CMT 6611. Topics include: kinetic molecular theory of gases, liquids, and solids; solution chemistry; kinetics, and equilibrium. Laboratory exercises emphasize solution preparation and volumetric titrations.
Prerequisites: CMT 6611.

6631 Chemistry 3 & Quantitative Analysis 4-4-6
A continuation of CMT 6621. Topics include: acid-base equilibrium, solubility equilibrium, thermochemistry, and electrochemistry. Laboratory exercises emphasize volumetric analysis.
Prerequisites: CMT 6621.

6641 Instrumental Chemical Analysis 1: Spectroscopy 3-3-4
A course on spectrophotometric methods of chemical analysis. Spectroscopic techniques include: visible and UV, infra-red, atomic absorption, inductively coupled plasma, nuclear magnetic resonance, and mass spectrometry.
Prerequisites: CMT 6631; CHE 2232 or CHE 2281.

6649 Chemical Technology Capstone 2-3-3
A project-oriented course in which students develop an experimental procedure, perform testing, apply statistical techniques, and incorporate the data into a formal report. The project pertains to the student's technical specialty area.
Prerequisites: CMT 6651.

CMT Chemical Technology
CRJ Criminal Justice

6651 Instrumental Chemical Analysis 2: Chromatography 3-3-4
A course on chromatographic methods of chemical analysis. Topics include: Gas Chromatography (GC), High Performance Liquid Chromatography (HPLC), GC-Mass Spectrometry, and independent laboratory techniques in instrumental analysis.
Prerequisites: CMT 6641.

6698 Special Problems Seminar - CMT Var-Var-Var
Study of selected topics in chemical technology designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

COMM Communication

1020 Public Speaking 3-0-3
A course on the preparation and effective delivery of various types of speeches. Topics include: improved listening techniques, audience participation, and evaluation.
Prerequisites: ENG 1001.

1021 Advanced Public Speaking 3-0-3
A continuation of COMM 1020, emphasizing skills needed to assess, prepare, and deliver effective public speeches. Topics include: audience analysis, manuscript research and development, and specialized speaking environments such as debates and group presentations.
Prerequisites: COMM 1020.

1023 Interpersonal Communication 3-0-3
Study and practical application of principles of communication in human interactions. Topics include: self-awareness; perception; conflict; listening; interviewing; verbal and nonverbal codes; and cultural expectations and their effects on communication in family, classroom, work, and intercultural settings.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1024 Group Dynamics & Problem Solving 3-0-3
A course on understanding people's roles as communicators, improving small group communication skills, developing problem-solving strategies as group members, and applying theories to work (i.e., quality circles) and personal relationships.
Prerequisites: None.

1025 Small Group Communication 3-0-3
The study of the dynamics of communication in the small group context. Topics include: small group communication theory and research, awareness of personal and others' behaviors in small groups, and development of skills for enhancing students' functioning in groups and analyzing/improving the functioning of other groups.
Prerequisites: COMM 1023.

1029 Special Topics in Communication 3-0-3
A course involving study and discussion of selected topics in communication. Content and emphasis may vary from term to term.
Prerequisites: ENG 1001.

1031 News Writing 1 2-2-3
An introduction to basic principles of journalism, emphasizing techniques for reporting and writing news stories. Laboratory activities involve preparation of materials for the College newspaper or other publications.
Prerequisites: Six hours of English composition.

1032 News Writing 2 2-2-3
A continuation of COMM 1031. Topics include: techniques for reporting and writing complex news stories and feature stories; and design, editing, and production of materials for varied forms of print journalism. Laboratory activities involve preparation of materials for the College newspaper or other publications.
Prerequisites: COMM 1031.

1033 Journalism Practicum 0-7-1
Practical journalism laboratory experience. Topics include: writing, editing, and production of the College newspaper or other publications. May be repeated for credit.
Prerequisites: COMM 1032.

1040 Mass Media and Culture 3-0-3
Study and discussion of the role and function of mass media (newspapers, magazines, film, radio, TV, and computer multimedia) in today's society, including assessment of historical, business, and cultural perspectives and implications.
Prerequisites: Six credits of English composition.

1044 Introduction to Film Studies, 1890s-1950s 2-3-3
A course on film as an expressive art and a cultural artifact, emphasizing American film from its inception to the 1950s. Topics include: developing critical awareness as an audience member; film history, genres, and themes; directing and acting styles; and technical elements of filmmaking. Students must view required films and complete regular written assignments.
Prerequisites: Six credits of English composition or instructor consent.

1045 Introduction to Film Studies, 1950s-present 2-3-3
A course on American film from the 1950s to the present. Topics include: developing critical awareness as an audience member; film history, genres, and themes; directing and acting styles; and technical elements of filmmaking. Students must view required films and complete regular written assignments.
Prerequisites: Six credits of English composition or instructor consent.

1050 Introduction to Broadcasting 3-0-3
Study and discussion of the history and development of radio, television, and other digital broadcast media. Topics include: regulatory, financial, and operating structures; programming content and criticism; and the role and influence of broadcast media.
Prerequisites: Six credits of English composition.

CRJ Criminal Justice

1250 Introduction to Criminal Justice 3-0-3
An overview of the American criminal justice system, its development and elements. Topics include: police, court, corrections, constitutional issues, citizen participation, and current practice.
Prerequisites: ENG 1001.

1251 Introduction to Policing and Law Enforcement 3-0-3
An overview of structure and practices of policing in the US. Topics include: the relationship of police agencies to other aspects of the justice system, effects of technology, diversity, drug enforcement, cynicism, corruption, reform, and community relations.
Prerequisites: CRJ 1250.

1252 Introduction to Corrections 3-0-3
An introduction to the history, principles, and practices of the corrections system. Topics include: an overview of the major components of incarceration, parole, and probation; developing practices; the operations of jails and prisons; and alternatives to incarceration including community-based programs.
Prerequisites: CRJ 1250.

1253 Criminal Courts & Procedures 1 3-0-3
An overview of the American legal system from a criminal justice perspective. Topics include: the basic procedures and applications of criminal law through the US Constitution, Bill of Rights, and recent case law.
Prerequisites: CRJ 1250.

1254 Criminal Courts & Procedures 2 3-0-3
An overview of the American legal system from a criminal justice perspective. Topics include: applying the knowledge and skills from CRJ 1253 with emphasis on case law and court procedures.
Prerequisites: CRJ 1253.

1255 Criminal Law 3-0-3
An overview of the American legal system from a criminal justice perspective including the basic elements of criminal law as defined by the Ohio Revised Code.
Prerequisites: CRJ 1254.

1256 Criminal Investigation Skills 3-0-3
An overview of basic investigation skills. Topics include: criminalistics, forensics, evidence types, procedures for handling, and admissibility.
Prerequisites: CRJ 1250.

1257 Juvenile Delinquency 3-0-3
A comprehensive study of juvenile delinquency and the juvenile court system.
Prerequisites: ENG 1001.

1298 Workshops in Criminal Justice Var-Var-Var
Study of selected topics in criminal justice designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

1299 Special Studies-Criminal Justice Var-Var-Var
Individual study and special projects pertaining to the student's area of concentration. This course is open to students wishing advanced standing or independent study. Students arrange this course with the advisor; requires consent of the Dean of Humanities and Sciences.
Prerequisites: None.

CUL Culinary Arts

2899 Culinary Symposium Var-Var-Var
Specialized advanced culinary laboratory courses offered to second year culinary arts students to fulfill elective requirements.
Prerequisites: CUL 2824, CUL 2843.

3601 Cooking 1 - Skills Development 0-6-2
A course on fundamental kitchen skills. Topics include: lab orientation and policies, equipment identification and operation, basic knife skills, product identification, and an introduction to cooking methods.
Prerequisites: DE 0011 and DE 0024, or appropriate placement test score.

3602 Cooking 2 - Stock Sauces, Soup 0-6-2
A continuation of CUL 3601. Topics include: preparing stocks, lead sauces, and basic soups as well as continued training in knife skills and cooking methods.
Prerequisites: CUL 3601.

3603 Cooking 3 - Meat, Fish, Poultry 0-6-2
A continuation of CUL 3602. Topics include: advanced cooking methods, meat, fish, and poultry cookery and an incorporation of all skills learned in CUL 3601 and CUL 3602.
Prerequisites: CUL 3602.

3604 Cooking 4 - Restaurant Cooking 0-6-2
An introduction to restaurant cooking. Students prepare breakfast and lunch items for dining room guests.
Prerequisites: CUL 3603.

3605 Cooking 5 - Butchery and Fish Mongering 0-6-2
A course on basic butchery and fish fabrication. Topics include: breaking down various meats from the whole carcass to fabricated cuts; cleaning, scaling, and filleting fish and shellfish; and cooking and presenting the various species of fish and shellfish.
Prerequisites: CUL 3604.

3606 Cooking 6 - Nutritional Cooking 0-6-2
A practical application of healthy cooking techniques. Through demonstration and lab experiences, students learn the principles of healthy cooking techniques, how to make appropriate healthy product substitutions, and how to modify existing recipes.
Prerequisites: DT 1202, CUL 3603.

3607 Cooking 7 - Garde Manger 0-9-3
An introduction to the contemporary practice of garde manger. Topics include: concepts of the cold kitchen such as cold entrees, pates, terrines, vegetable design, and platter and buffet presentation.
Prerequisites: CUL 3605.

3608 Cooking 8 - International Cuisine 0-9-3
A course on producing international menus emphasizing practical baking, roasting, frying, stir-frying, sauteing, steaming, braising, and stewing skills.
Prerequisites: CUL 3607.

3609 Cooking 9 - Banquets 0-9-3
A course on banquet planning, preparation, and execution. Topics include: plate-up, action station, and buffet presentation. Students participate in banquet events.
Prerequisites: CUL 3608.

3610 Cooking 10 - Advanced Restaurant Cooking 0-9-3
A course on advanced restaurant cooking. Students prepare appetizers, entrees, and desserts for dining room guests.
Prerequisites: CUL 3609.

3611 Baking for Restaurants 1 0-6-2
An introduction to the baking and pastry environment. Topics include: identifying raw bakery product; using mixing machines, ovens, and hand equipment; and producing flour confectionery items.
Prerequisites: CUL 3601.

3612 Baking for Restaurants 2 0-6-2
A continuation of CUL 3611. Topics include: preparing simple and complex desserts for daily menus, restaurants, banquets, and catering businesses; displaying desserts; and dessert costs.
Prerequisites: CUL 3611.

CULT Culture Studies

1602 Issues in Human Diversity 3-0-3
An expansion of applied social psychology principles to the broader scope of human society. Topics include: bias assumptions; stereotypes; the concept of a fair, just, and civil workplace; and legal ramifications. Students participate in structured activities and focused discussion groups.
Prerequisites: DE 0005 and DE 0011 or appropriate placement test scores.

1645 Technology and Culture 3-0-3
Study and discussion of the impact and consequences of various applications of science and technology, both historical and current, on individuals and cultures.
Prerequisites: Six credits of English composition.

1647 Work and Society 3-0-3
A course on the changing aspects of work today. Topics include: the significance and meaning of work to individuals, organizations, and cultures through examination of materials drawn from literary, economic, sociological, political, and other cultural perspectives.
Prerequisites: Six credits of English composition.

1648 Social Issues in Technology 3-0-3
A survey of social issues that affect professionals in engineering and information technology fields. Topics include: professional ethics and whistleblowing, diversity and bias in the workplace, and the social effects of globalization and outsourcing.
Prerequisites: ENG 1001.

DD Developmental Disabilities

1220 Interviewing & Counseling for the DD Professional 3-0-3
A course on case management/service coordination for interviewing and counseling persons with DD and their families. Topics include: methods of interviewing/counseling, confidentiality, documentation, identifying need for crisis intervention, conflict management skills, and implementing and reinforcing professional boundaries.
Prerequisites: Employed by a County Board of DD or instructor consent.

1221 Group Facilitation for DD Professional 3-0-3
A course on the effective development of Professional Service Teams to provide services to the developmental disabilities population. Topics include: DD team development, roles and responsibilities within DD teams, and managing conflict within teams and with individuals served.
Prerequisites: Employed by a County Board of DD or instructor consent.

1222 Behavior Support for the DD Professional 3-0-3
A course on positive reinforcement behavior support techniques used with people with developmental disabilities. Topics include: defining and monitoring behaviors, identifying appropriate reinforcements, determining if crisis intervention is needed, and applying appropriate ethical and legal standards.
Prerequisites: Employed by a County Board of DD or instructor consent.

1223 Introduction to DD for the DD Professional 3-0-3
A course on the needs of persons with developmental disabilities and providing quality services to meet those needs. Topics include: definition and diagnosis of DD, prevention, requirements for services, therapies/treatments/services, rights and responsibilities, laws, and resources.
Prerequisites: Employed by a County Board of DD or instructor consent.

1224 Habilitation Programming for the DD Professional 3-0-3
A course on habilitation, vocational, and recreational alternatives for persons with developmental disabilities. Topics include: assessment tools, transitioning methods; alternatives to the traditional workshop; inclusion in the community; and use of technology, materials, and aids to develop or expand skills.
Prerequisites: Employed by a County Board of DD or instructor consent.

1225 Principles of Work for the DD Professional 3-0-3
A course on work and employment principles for individuals with developmental disabilities. Topics include: the DD system's role in employment skill development; work designs and settings; job development, placement, and retention; production and motivational techniques; documentation; community/customer relations; marketing; and employment service resources.
Prerequisites: Employed by a County Board of DD or instructor consent.

DD Developmental Disabilities
DMS Diagnostic Medical Sonography

1226 Principles of Self-Determination for the DD Professional 3-0-3
A course on the concepts and principles of self-determination as they pertain to the lives of persons with developmental disabilities. Topics include: philosophies, practices, challenges, and practical strategies for the implementation of self-determination by DD professionals.
Prerequisites: Employed by a County Board of DD or instructor consent.

DE Developmental Education

0003 Basic Writing 1 4-0-4
A course on sentence development and preparation for college level writing.
Prerequisites: None.

0004 Basic Writing 2 4-0-4
A continuation of DE 0003. Topics include: sentence development, paragraph writing, and an introduction to essay writing.
Prerequisites: DE 0003 (minimum grade B) or appropriate placement test score.

0005 Basic Writing 3 4-0-4
A continuation of DE 0004, emphasizing essay development.
Prerequisites: DE 0004 (minimum grade C) or appropriate placement test score.

0010 College Reading 1 4-0-4
A course on reading skills and strategies needed to comprehend college-level textbooks. Topics include: previewing, recognizing main ideas, developing vocabulary, increasing comprehension, and thinking critically.
Prerequisites: None.

0011 College Reading 2 4-0-4
A continuation of DE 0010. Topics include: previewing, developing vocabulary, increasing comprehension, synthesizing information, and thinking critically.
Prerequisites: DE 0010 (minimum grade B) or appropriate placement test score.

0018 Integrated College Prep Skills Var-Var-Var
Integrated instruction in college preparatory reading, writing, and basic mathematics fundamentals. Students participate in a collaborative learning community that prepares them for the next level of coursework through group activities and problem-based instruction.
Prerequisites: DE 0004 (minimum grade C) and DE 0010 (minimum grade B) or appropriate placement test scores.

0020 Basic Mathematics 1 4-0-4
A review of basic mathematics and preparation for algebra. Topics include: application problems involving fractions, decimals, and percents; ratio and proportion; estimation; measurement; conversion; use of formulas.
Prerequisites: None.

0024 Basic Algebra 1 4-0-4
An entry-level algebra course. Topics include: using variable expressions and equations to represent mathematical problems and relationships; interpreting and constructing graphs; using signed numbers; evaluating formulas; solving two-step linear equations; understanding linear relationships using equations, graphs, and tables; and scientific notation.
Prerequisites: DE 0020 (minimum grade B) or appropriate placement test score.

0025 Basic Algebra 2 4-0-4
A continuation of DE 0024. Topics include: rates, ratios, and proportions; deeper understanding of linear equation graphs including slope and intercepts; understanding the difference between linear and non-linear relationships; and solving simple systems of linear equations.
Prerequisites: DE 0024 (minimum grade C) or appropriate placement test score.

0098 Topics in Developmental Education Var-Var-Var
Study of selected topics in Developmental Education. Content and emphasis may vary from term to term.
Prerequisites: None.

DES Design

6001 Orientation to the Portfolio Process 1-1-1
Students establish goals and begin assessing content for inclusion in their professional portfolio.
Prerequisites: Admitted to the Design Certificate program and instructor consent.

6002 Personal Brand Development 1 1-1-1
Students prepare self-promotional materials needed to effectively convey their personal brand identity to employers and clients.
Prerequisites: DES 6001, instructor consent.

6003 Personal Brand Development 2 1-1-1
A continuation of DES 6002, emphasizing effective integration of creativity and business acumen.
Prerequisites: DES 6002, instructor consent.

6004 Design Competition 1-1-1
Students develop their ideas from concept to completion to prepare entries for design competitions such as the ADDY Awards or other juried events.
Prerequisites: DES 6003, instructor consent.

6005 Personal Promotional Portfolio 1-1-1
Students deliver a formal presentation of their portfolio to a panel of evaluators from academe and industry.
Prerequisites: DES 6004, instructor consent.

DMS Diagnostic Medical Sonography

4630 Survey of Medical Sonography 2-2-3
A survey of the field of diagnostic medical sonography. Topics include: role of the sonographer in the healthcare setting, ultrasound system controls and functions, ultrasound image production and display, and basic ultrasound physics. Students must be proficient in Microsoft PowerPoint for presentations and assignments.
Prerequisites: BIO 4015 and MCH 4806 (minimum grade C for both).

4632 Introduction to Diagnostic Medical Sonography 3-0-3
A course on sonography in healthcare. Topics include: terminology, professional affiliations, departmental function, relationship to other imaging modalities, and professional qualities.
Prerequisites: Admitted to the DMS Abdominal/Obstetrics Gynecology program, DMS Cardiovascular program, or program chair consent.

4633 Introduction to General Imaging Scanning 1-2-2
A beginning laboratory course on scanning techniques and operating ultrasound systems. Topics include: using basic ultrasound machine controls, scan planes, and descriptive terminology associated with obstetrics and gynecology studies and with ultrasonic imaging of the abdomen and small parts.
Prerequisites: DMS 4632 (minimum grade C).

4634 Principles of Abdominal/OB/GYN Sonography 2-6-5
An introductory course on clinical scanning of abdominal structures. Topics include: concepts and techniques for sonographic imaging and patient care. Includes laboratory experience with scanning techniques and protocols.
Prerequisites: DMS 4633 (minimum grade C).

4635 Introduction to Cardiovascular Scanning 1-2-2
A beginning laboratory course on cardiovascular scanning techniques and the operation of ultrasound systems. Topics include: using basic ultrasound machine controls, scan planes, and descriptive terminology associated with cardiac and vascular studies.
Prerequisites: DMS 4632 (minimum grade C).

4636 Principles of Cardiovascular Sonography 2-6-5
An introductory course on cardiovascular ultrasound procedures and techniques. Topics include: concepts and techniques for sonographic imaging and patient care, scanning techniques, and protocols.
Prerequisites: DMS 4635 (minimum grade C).

4637 Sonographic Physics and Instrumentation 1 3-0-3
A course on the theoretical and practical aspects of ultrasound physics and instrumentation. Topics include: characteristics of sound energy; using ultrasound in imaging; and waveforms, propagation, velocity, wavelength, acoustic impedance, reflection, and other types of interaction with tissue.
Prerequisites: DMS 4634 or DMS 4636 (minimum grade C).

4638 Sonographic Physics and Instrumentation 2 3-0-3
A continuation of DMS 4637. Topics include: integrating knowledge of physics with instrumentation theory and applications, advanced signal processing, complex instrumentation, recording devices, biological effects, hemodynamics, Doppler principles, quality control methods, and producing high quality diagnostic images.
Prerequisites: DMS 4637 (minimum grade C).

4640 Issues in Sonography 2-0-2
A course on topics related to the sonography profession. Topics include: legal and ethical issues, laboratory accreditation, education, and research.
Prerequisites: DMS 4642 or DMS 4673 (minimum grade C).

4641 Cardiovascular Clinical 1 - Part 1 1-24-3
Supervised practice in which students continue to develop cardiovascular diagnostic ultrasound skills in hospitals, clinics, and physician offices. Students receive grades of N at the end of the term; final grade is determined upon completing DMS 4642.
Prerequisites: DMS 4636 (minimum grade C).

4642 Cardiovascular Clinical 1- Part 2 1-24-3
A continuation of DMS 4641. Students continue to develop cardiovascular diagnostic ultrasound scanning skills in hospitals, clinics, and physician offices. Students are evaluated for final competencies.
Prerequisites: DMS 4641.

4643 Cardiovascular Clinical 2 - Part 1 1-24-3
Supervised practice in which students continue to develop cardiovascular diagnostic ultrasound scanning skills in hospitals, clinics, and physician offices. Students receive a grade of N at the end of the term; final grade is determined upon completing DMS 4644.
Prerequisites: DMS 4642.

4644 Cardiovascular Clinical 2 - Part 2 1-24-3
A continuation of DMS 4643. Students continue to develop cardiovascular diagnostic ultrasound scanning skills in hospitals, clinics, and physician offices. Students are evaluated for final competencies.
Prerequisites: DMS 4643.

4645 Echocardiography 1 2-2-3
An introductory course on cardiac sonography. Topics include: cardiac anatomy, physiology, and pathological conditions of the adult heart and visualization of real-time two-dimensional imaging, Doppler, and M-mode echocardiography.
Prerequisites: DMS 4636 (minimum grade C).

4646 Echocardiography 2 2-2-3
A continuation of DMS 4645. Topics include: cardiovascular pathophysiology; quantitative measurements; and applying two-dimensional, M-mode, and Doppler imaging.
Prerequisites: DMS 4645 (minimum grade C).

4647 Echocardiography 3 2-2-3
A continuation of DMS 4646. Topics include: cardiovascular pathophysiology; quantitative measurements; applying two-dimensional, M-mode, and Doppler imaging; and transesophageal, intraoperative, and other diagnostic procedures.
Prerequisites: DMS 4646 (minimum grade C).

4648 Vascular Sonography 1 2-2-3
A course on fundamental theory and skills for evaluating vascular disease using noninvasive techniques. Topics include: instrumentation and vascular anatomy, physiology, pathology, and hemodynamics. Students learn testing procedures for the cerebrovascular system.
Prerequisites: DMS 4636 (minimum grade C).

4649 Vascular Sonography 2 2-2-3
A continuation of DMS 4648. Topics include: peripheral arterial and venous pathophysiology; quantitative measures; and applying real-time sonographic imaging, Doppler imaging, and spectral analysis; and physiologic testing.
Prerequisites: DMS 4648 (minimum grade C).

4650 Cardiovascular Seminar 2-0-2
A course that correlates sonographic concepts and clinical applications in cardiovascular sonography, provides preparation for the ARDMS examination, and facilitates transition from student to entry-level cardiovascular sonographer.
Prerequisites: DMS 4644 (minimum grade C).

4654 Vascular Sonography 3 2-2-3
A continuation of DMS 4649. Topics include: abdominal vasculature imaging, interventional vascular procedures, and other diagnostic vascular tests.
Prerequisites: DMS 4649 (minimum grade C).

4655 Cardiovascular Clinical 3 1-24-3
Supervised off-campus experience and practice of diagnostic cardiovascular ultrasound procedures in hospitals, clinics, and private physician offices. Students build on previous clinical experiences in ultrasound scanning skills and techniques and are evaluated for final competencies.
Prerequisites: DMS 4644 (minimum grade C).

4656 Cardiovascular Specialties 1-2-2
A course on advanced cardiovascular procedures and technologies. Topics include: quality assurance testing, contrast agents, three-dimensional imaging, and other diagnostic procedures.
Prerequisites: DMS 4647, DMS 4654 (minimum grade C for both).

4672 Clinical Sonography 1 - Part 1 1-24-3
Supervised off-campus practice of abdominal, OB/GYN and small parts ultrasound procedures in hospitals, clinics, and physician offices. Students receive a grade of N at the end of the term; final grade is determined upon completing DMS 4673. Students are evaluated for final competencies.
Prerequisites: DMS 4634.

4673 Clinical Sonography 1 - Part 2 1-24-3
A continuation of DMS 4672. Students continue to develop ultrasound scanning skills and techniques by performing abdominal, small parts, and OB/GYN diagnostic ultrasound procedures in an off-campus healthcare facility. Students are evaluated for final competencies.
Prerequisites: DMS 4672.

4674 Clinical Sonography 2 - Part 1 1-24-3
The first part of a two-part sequence of supervised practice. Students develop ultrasound scanning skills and techniques by performing abdominal, small parts, and OB/GYN diagnostic ultrasound procedures in an off-campus healthcare facility. Students are evaluated for competencies. Students receive grades of N at the end of the term; final grade is determined upon completing DMS 4675.
Prerequisites: DMS 4673 (minimum grade C).

4675 Clinical Sonography 2 - Part 2 1-32-5
A continuation of DMS 4674. Students continue to develop ultrasound scanning skills and techniques by performing abdominal, small parts, and OB/GYN diagnostic ultrasound procedures in an off-campus healthcare facility. Students are evaluated for final competencies.
Prerequisites: DMS 4674 (minimum grade C).

4676 Abdominal Sonography 1 2-2-3
An introduction to abdominal sonography. Topics include: interpreting clinical tests, related clinical signs and symptoms, and normal and abnormal sonographic patterns. Includes laboratory experience with scanning techniques and protocol relative to abdominal structures and physiology.
Prerequisites: DMS 4634 (minimum grade C).

4677 Abdominal Sonography 2 2-2-3
A continuation of DMS 4676. Topics include: interpreting clinical tests, related clinical signs and symptoms, and normal and abnormal sonographic patterns. Includes laboratory experience with scanning techniques and protocol relative to abdominal structures and physiology.
Prerequisites: DMS 4676 (minimum grade C).

4678 Superficial and Small Parts Sonography 2-2-3
A continuation of DMS 4677. Topics include: superficial structures in sonography; presenting basic small parts anatomy; and scanning techniques and protocols for identifying normal and abnormal sonographic patterns in the breast, thyroid, scrotum, prostate, and musculoskeletal system.
Prerequisites: DMS 4677 (minimum grade C).

4683 OB/GYN Sonography 1 2-2-3
An introduction to obstetrical and gynecological sonography. Topics include: interpreting clinical tests, imaging methods of the female pelvis, normal gravid uterus, related clinical signs and symptoms, and normal sonographic patterns.
Prerequisites: DMS 4634 (minimum grade C).

4684 OB/GYN Sonography 2 2-2-3
A continuation of DMS 4683. Topics include: abnormal etiology and diagnostic techniques related to fetal development, obstetrical scanning techniques and protocols, and detecting abnormalities and pathology.
Prerequisites: DMS 4683 (minimum grade C).

4685 OB/GYN Sonography 3 2-2-3
A continuation of DMS 4684. Topics include: special procedures in OB/GYN sonography, high-risk obstetrics, deviations from normal development, and detecting abnormalities and pathology.
Prerequisites: DMS 4684 (minimum grade C).

4687 Sonography Seminar 2-0-2
A course that provides correlation between previously learned sonographic concepts and clinical applications in general sonography. Topics include: student transition to an entry-level general sonography position and preparation for the ARDMS examination.
Prerequisites: DMS 4674 (minimum grade C).

DMS Diagnostic Medical Sonography
DT Dietetic Technology

4688 General Imaging Specialties 1-2-2
A course on advanced general imaging and obstetric procedures and technologies. Topics include: quality assurance testing, 3-D and 4-D imaging, I-slice functionality, and other diagnostic procedures.
Prerequisites: DMS 4647, DMS 4651 (minimum grade C for both).

4698 Special Studies in Diagnostic Medical Sonography Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

4699 Special Studies in Diagnostic Medical Sonography Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

DT Dietetic Technology

1201 Dietetics Professional Practice 1-0-1
A mandatory orientation course for students who wish to complete dietetic directed practice or practicum courses. Topics include: dietetic professional practice requirements, dietetic licensure, HIPAA, bloodborne pathogens protection and universal precautions training, and portfolio development.
Prerequisites: None.

1202 Nutrition for a Healthy Lifestyle 3-0-3
A review of basic nutrition concepts and diets for healthy living. Topics include: fundamentals of nutrition and metabolism, health promotion and risk, disease prevention, complementary/alternative therapies, dietary supplements, life cycle nutritional concerns.
Prerequisites: DE 0024, DE 0011.

1203 Cooking for a Healthy Lifestyle 1-3-2
A course that integrates basic food preparation techniques and healthy food choices for the individual. Topics include: basic food preparation, choosing healthy food, modifying recipes, and consumer food safety. Students prepare and evaluate healthy foods in the laboratory.
Prerequisites: None.

1204 Nutrition for the Life Cycle 3-0-3
The study of nutritional needs from preconception through maturity. Topics include: influence of age, growth, and normal development on nutritional requirements across the lifespan; diet planning principles for diverse age groups; and promoting healthy eating to reduce age-related nutrition problems.
Prerequisites: DT 1202.

1205 Nutrition Assessment 1 1-2-2
An introduction to nutrition assessment techniques. Topics include: anthropometrics, nutrition screening and assessment, nutrient calculations, drug–nutrient interactions, computerized nutrient analysis, communication and interviewing skills, and healthcare funding.
Prerequisites: DT 1204.

1206 Community Nutrition 2-0-2
A study of food and nutrition programs for the individual, family, and community. Topics include: food availability; food and nutrition laws, regulations, and policies; and the influence of socioeconomic, cultural, and psychological factors on food and nutrition behavior.
Prerequisites: DT 1204.

1207 Food and Culture 1-4-3
The study of sociocultural and ethnic food patterns for diverse populations. Topics include: program planning, presentation, monitoring, and evaluation of a cultural food event. A team-based project for students who are near the completion of their degree.
Prerequisites: DT 1202, CUL 3601, HRM 3631.

1208 Food Systems Management 1 2-0-2
An introduction to meal service systems for healthcare environments. Topics include: evaluating meal production, service, and delivery systems; quality improvement; risk management; forecasting; and food service equipment.
Prerequisites: MAT 1108, HRM 3601, HRM 3631.

1209 Food Systems Management 2 2-0-2
A continuation of DT 1208. Topics include: productivity, work simplification, budgeting, marketing, employee training, and ethics.
Prerequisites: DT 1208.

1210 Quantity Food Production 2-5-4
A comprehensive instruction and practice in quantity food production. Topics include: identifying and using commercial equipment; standardized recipes; applying sanitation and safety principles; kitchen organization; product identification; work efficiency; and menu planning, preparation, and purchasing.
Prerequisites: CUL 3601, HRM 3631.

1211 Human Resources in Dietetics 2-0-2
This course provides applied management skills for persons employed in dietetics. Various organizational structures and types of leadership are explored plus policy and procedure writing and communication. The course covers practical knowledge needed for recruiting, hiring, training, and evaluating food service employees.
Prerequisites: None.

1220 Nutrition for Dietary Managers 2-0-2
The study of nutrition for the dietary manager's scope of practice. Topics include: basic medical nutrition therapy, documentation, care planning, nutrition education, and health care regulations.
Prerequisites: DT 1201, DT 1205.

1221 Dietary Manager Exam Review 1-0-1
A review course for students who are planning to take the Dietary Manager credentialing examination.
Prerequisites: Students have already met the exam requirements by graduating from an approved DMA program or other DMA-approved eligible pathway. Students have registered or plan to register for the exam through DMA.

1230 Dietetic Directed Practice: Lifespan 0-5-1
Supervised practice experience for community and life cycle nutrition. Topics include: practice in evaluating nutrition services for a variety of community-based programs, food assistance programs, and programs that serve diverse special needs populations.
Prerequisites: DT 1201, DT 1204.
Corequisites: DT 1205, DT 1206.

1231 Dietetic Directed Practice - Health Care 0-5-1
Supervised off-campus practice in a health care facility. Students practice skills including: interviewing, monitoring food and nutrient intake, screening, basic nutrition assessment, documentation, care planning, and menu modification.
Prerequisites: DT 1230.
Corequisites: DT 1220 or DT 1240.

1232 Dietetic Management Practicum 0-7-1
On or off-campus unpaid work experience in which students apply learned concepts to practical situations within the field of dietetics. Topics include: food service management, human resources, and sanitation.
Prerequisites: DT 1230.
Corequisites: DT 1208.

1233 Dietetic Food Service Practicum 0-7-1
On or off-campus unpaid work experience for dietetic students. Students review competencies, set individual curriculum goals for the course, and complete a final project.
Prerequisites: DT 1232.
Corequisites: DT 1209.

1240 Nutrition Assessment 2 3-0-3
A continuation of DT 1205. Topics include: health assessment, laboratory tests, complementary and alternative nutrition, metabolism, nutrition during health and illness, teaching and counseling theory, and healthcare systems.
Prerequisites: DT 1205.

1241 Medical Nutrition Therapy 1 2-2-3
The study of clinical nutrition and medical nutrition therapy. Topics include: weight management; disorders of the upper gastrointestinal tract; diabetes mellitus; and diseases of heart, lungs, and blood vessels.
Prerequisites: DT 1240.
Corequisites: BIO 4016, CHE 2236.

1242 Medical Nutrition Therapy 2 2-2-3
A continuation of DT 1241. Topics include: disorders of the lower gastrointestinal tract, pressure ulcers, stress, and enteral and parenteral nutrition.
Prerequisites: DT 1241.

1243 Medical Nutrition Therapy 3 2-2-3
A continuation of DT 1242. Topics include: renal disease, liver disorders, nutrition in severe stress, and nutrition during cancer and HIV infection.
Prerequisites: DT 1242.

1244 Dietetic Technician Seminar 1-0-1
A course that prepares students to enter the dietetics profession. Topics include: dietetic portfolio process; legislation; practice issues; and dynamic trends in foods, nutrition, and dietetics. Students present their portfolio.
Prerequisites: DT 1252.

1245 Dietetic Technician Exam Preparation 2-0-2
A course that prepares students for the DTR examination. Topics include: examination preparation, clinical and food service review, and capstone exam. Students must pass capstone exam to pass the course.
Prerequisites: DT 1232, DT 1252.

1250 Dietetic Technician Directed Practice - MNT 1 0-5-1
Supervised off-campus practice in a health care facility for dietetic technician students. Students build upon previous directed practice experiences. Topics include: clinical nutrition and medical nutrition therapy (MNT) for weight management, diabetes, cardiovascular disease, and disorders of the upper gastrointestinal system.
Prerequisites: DT 1231.
Corequisites: DT 1241.

1251 Dietetic Technician Directed Practice - MNT 2 0-10-2
Supervised off-campus practice for dietetic technician students in a hospital setting. Students build upon previous directed practice experiences. Topics include: care plans, enteral and parenteral nutrition regimens, transitional feeding, reimbursement, severe stress, and disorders of the lower gastrointestinal tract.
Prerequisites: DT 1250.
Corequisites: DT 1242.

1252 Dietetic Technician Directed Practice - MNT 3 0-5-1
Supervised off-campus practice for dietetic technician students at Cincinnati Children's Hospital Medical Center. Students build upon previous directed practice experiences. Topics include: quality improvement; health care regulations; pediatric nutrition assessment; and medical nutrition therapy for complex medical conditions of cancer, HIV, liver disease, and kidney disease.
Prerequisites: DT 1251.
Corequisites: DT 1243.

1253 Dietetic Technician Clinical Practicum 0-7-1
On or off-campus unpaid work experience in a health care environment. This is the final clinical practice experience for dietetic technician students. Students review ADA competencies and set individual curriculum goals for the course.
Prerequisites: DT 1252.

1298 Food and Nutrition Symposium Var-Var-Var
Specialized food and nutrition courses offered to fulfill elective requirements.
Prerequisites: None.

1299 Special Studies - Dietetics Var-Var-Var
Study or special projects pursued by dietetics students seeking college credit in a degree or certificate curriculum. Students must have the plan of study approved by the supervising faculty member and the Dean of Business Technologies. Instructor consent required.
Prerequisites: None.

ECE Early Childhood Education

4353 Role of the Teacher Assistant 3-0-3
An overview of the early childhood education field and the role that the teacher assistant plays in early child care settings. Topics include: licensing regulations and completion of paperwork required in early child care settings.
Prerequisites: None.

4354 Creative Activities for Teacher Assistants 4-0-4
An exploration of the role of the teacher assistant in working with the lead teacher in carrying out activities in all of the content areas of the early childhood classroom. This includes art, music, play, math, science, and early literacy.
Prerequisites: None.

4355 Teacher Assistant Practicum 1-7-2
A practicum course that includes 40 hours of hands-on supervised experience in an early child care setting.
Prerequisites: None.

4356 Enhancing Infant and Toddler Development through Play 4-0-4
A course that facilitates early childhood educators in creating an infant and toddler curriculum that is developmentally appropriate in all areas using play as a basis for individual and group activities.
Prerequisites: None.

4357 Creative and Recreational Activities for School Age Children 4-0-4
A course that assists early childhood educators working in before/after school age programs, recreation centers, and summer programs to provide developmentally appropriate activities designed to enhance the learning potential of children ages five through 12.
Prerequisites: None.

4358 Classroom Management for Early Childhood Education 3-0-3
A course that teaches early childhood educators strategies of behavior management for children from birth through age twelve. This course explores methods for program design that maximize developmentally appropriate practice techniques for school-age children.
Prerequisites: None.

4359 Foundations of Early Childhood Care and Education 3-0-3
An introduction to the early childhood field. Topics include: theorists; historical, social, and philosophical foundations; and requirements for entry into the program. Students must complete the early childhood care and education. Admissions requirements including reference, background checks (fee charged), and physical exam.
Prerequisites: None.
Corequisites: ECE 4368.

4360 Principles of Early Childhood Education 3-0-3
A course on the theories of early childhood care. Topics include: theories regarding physical, mental, social, emotional, and cognitive growth and development from birth through age eight, including developmentally appropriate practice.
Prerequisites: None.

4361 Early Childhood 1 - Infant/Toddler 3-0-3
A course on the care and nurturing of infants and toddlers. Topics include: specific strategies for promoting growth and development, classroom management, and guidance in developmentally appropriate childhood practice.
Prerequisites: ECE 4359, ECE 4360, ECE 4368.
Corequisites: ECE 4362.

4362 Early Childhood Practicum 1 - Infant/Toddler 1-7-2
Practical application of childcare principles in an infant/toddler setting. Experiences include observations and supervised direct practice.
Prerequisites: None.
Corequisites: ECE 4361.

4363 Early Childhood 2 - Preschool 3-0-3
A course on developmental principles and educational theories involved in teaching preschool children. Topics include: classroom management and guidance and inclusion strategies in developmentally appropriate childhood practice.
Prerequisites: ECE 4361, ECE 4362.
Corequisites: ECE 4364.

4364 Early Childhood Practicum 2 - Preschool 1-7-2
Practical application of childcare principles in a preschool setting. Includes observation and supervised direct practice.
Prerequisites: ECE 4361, ECE 4362.
Corequisites: ECE 4363.

4365 Early Childhood 3 - School Age 3-0-3
A course on developmental principles and educational theories involved in teaching children ages five through eight. Topics include: effective structure and environments, curriculum, classroom management, and guidance and inclusion strategies in developmentally appropriate childhood practice.
Prerequisites: ECE 4363, ECE 4364.
Corequisites: ECE 4366.

4366 Early Childhood Practicum 3 - School Age 1-7-2
Practical application of childcare and education principles in programs for school-age children. Includes observation and supervised direct practice.
Prerequisites: ECE 4363, ECE 4364.
Corequisites: ECE 4365.

ECE Early Childhood Education
ECM E-Commerce Marketing

4367 Art, Music, Play for Early Childhood Programs 3-0-3
A course on learning experiences for young children related to art, music, and physical activities. Topics include: selecting materials for indoor/outdoor play equipment, applying theories and techniques appropriate for infants through school-age, classroom management, and guidance in developmentally appropriate childhood practice.
Prerequisites: None.

4368 Early Childhood Assessment and Observation Techniques 2-0-2
A course on strategic and purposeful techniques for assessing the progress of children. Topics include: recording and observing children from infants to school-age.
Prerequisites: None.
Corequisites: ECE 4359.

4369 Parents and Families in Early Childhood Education 2-0-2
An introduction to methods for parent/teacher collaboration. Topics include: effective communication among parents, teachers, and other professionals for enhancing child development; maintaining positive relationships; and including diverse family units.
Prerequisites: None.

4370 Nutrition and Health for Early Childhood Programs 3-0-3
A course on concepts related to basic health, nutrition, and safety management techniques. Topics include: specific procedures for infants and toddlers, childhood illnesses, communicable diseases, and USDA requirements.
Prerequisites: None.

4371 Communicable Diseases of Early Childhood 1-0-1
A course on the recognition, prevention, transmission, and management of early childhood communicable diseases.
Prerequisites: None.

4372 Child Abuse Recognition and Prevention 1-0-1
A course on various types of abuse children may face. Topics include: recognition and prevention of neglect and physical, mental, emotional, verbal, and sexual abuse.
Prerequisites: None.

4374 Language Development 3-0-3
A course on the growth and nurturing of oral language development in infants through school-age children. Topics include: development of listening, communication, and social interaction skills and introduction to early literacy book selections for infants through school age.
Prerequisites: ENG 1001.

4375 Diversity Education for Early Childhood Programs 3-0-3
A course on providing appropriate educational experiences to assist in socialization of young children. Topics include: global multiculturalism, social studies, inclusion, educational practices, materials, and teacher education.
Prerequisites: None.

4376 Exceptional Children 3-0-3
A course on observation, identification, inclusion, and adaptations of learning environments for children who have physical, cognitive, and social development disabilities as well as for gifted children. Topics include: legal issues, community resources, and communication with families.
Prerequisites: None.

4377 Math and Science for Early Childhood Programs 3-0-3
A course on math and science learning experiences for young children. Topics include: selecting materials, applying theories and techniques for infants through school-age, and developing critical thinking and problem solving skills. Meets State of Ohio benchmark standards for math and science.
Prerequisites: DE 0020 or appropriate placement test score.

4378 Administration of Childhood Programs 4-0-4
A course on organization, operation, and management of childcare facilities and family care homes. Topics include: licensing requirements, record keeping, budgeting, working with staff and parents, team building, and resolving conflicts.
Prerequisites: ECE 4365.

4381 Early Literacy 1 3-0-3
Study of reading and writing skills development from birth to age eight. Topics include: assessing the reading and writing processes of children, developing learning experiences to meet individual needs, and involving families in supporting language and literacy development.
Prerequisites: ECE 4374.

4382 Early Literacy 2 3-0-3
A continuation of ECE 4381 with emphasis on the role of the teacher in the promotion of early literacy from birth to age eight. Topics include: creating age-appropriate learning environments, creating and selecting materials, planning curricula, and using a variety of effective learning strategies.
Prerequisites: ECE 4381.

4383 Early Literacy 3 3-0-3
A continuation of ECE 4382 with emphasis on phonemic awareness. Topics include: vocabulary development and selecting and designing materials to accommodate individual and cultural differences. This course meets State of Ohio benchmark standards for reading and writing.
Prerequisites: ECE 4382.

4384 Curriculum Design 3-0-3
A course on planning developmentally appropriate curricula and lessons to enhance childhood cognitive, social, emotional, and physical skills. Topics include: observations, demonstrations of instructional technologies, and software for enhancing curriculum design.
Prerequisites: None.

4386 Professional, Legal, and Ethical Issues in Childhood Education 3-0-3
A course on professional practices, confidentiality, NAEYC ethical standards and Code of Conduct, legal issues, and policy implementation for childhood programs.
Prerequisites: ECE 4366.

4387 Special Topics in Early Childhood Care and Education Var-Var-Var
A course on special topics in early childhood care and education. Content and emphasis vary from term to term. May be repeated for credit.
Prerequisites: None.

4388 Child Development Associate (CDA) Portfolio Development 1-2-2
A course in which Early Childhood Care and Education students complete a resource file to include in the portfolio that documents their skills relevant to the Child Development Associate (CDA) competency areas.
Prerequisites: ECE 4364.

4389 Early Childhood Skills 5-0-5
A course for students who hold a valid and current (CDA) Child Development Associate credential and have not graduated from an accredited college or university. Students must demonstrate competency and developmentally appropriate practice in early childhood care and education settings.
Prerequisites: Program chair consent.

9900 Internship - Early Childhood Care and Education 1-20-2
Students participate in a part-time unpaid field experience that provides an opportunity to apply knowledge and skills acquired in class. Students must adhere to program internship policies and procedures to earn credit.
Prerequisites: Admitted to the ECE program.

9901 Cooperative Education - Early Childhood Care and Education 1-40-2
Students participate in a full-time paid field learning experience that provides an opportunity to apply knowledge and skills acquired in class. Students must adhere to program cooperative education policies and procedures to earn credit.
Prerequisites: Admitted to the ECE program.

9902 Parallel Cooperative Education - Early Childhood Care and Education 1-20-1
Students participate in a part-time paid field experience that provides an opportunity to apply knowledge and skills acquired in college classes. Students must adhere to program cooperative education policies and procedures to earn credit.
Prerequisites: Admitted to the ECE program.

9905 Student Teaching - Early Childhood Care and Education 1-20-2
This supervised student teaching experience requires a minimum of fourteen hours per week in an approved early childhood setting. Placement priority is given to settings that are accredited and serve culturally, linguistically, and socio-economically diverse student populations.
Prerequisites: ECE 4366.

ECM E-Commerce Marketing

9254 Cooperative Education-E-Commerce Marketing 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to E-Commerce Marketing program, 2.0 minimum GPA.

9255 Cooperative Education-E-Commerce Marketing 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to E-Commerce Marketing program, 2.0 minimum GPA.

ECO Economics

1512 Microeconomics 3-0-3
An overview of the economic micro-system. Topics include: role of supply and demand in determination of value and resource allocation, consumer choice theory, firm behavior in competitive and imperfect markets, international trade, and comparative advantage.
Prerequisites: DE 0005 and DE 0011 and DE 0024 or appropriate placement test scores.

1513 Macroeconomics 3-0-3
An overview of the economic macro-system. Topics include: aggregate demand and supply, government fiscal policy, monetary policy, national income determination, long run growth policies, business cycles, government deficits policies, and effects of international exchange rates.
Prerequisites: DE 0005 and DE 0011 and DE 0024 or appropriate placement test scores.

1514 International Aspects of Economics 3-0-3
A course on the application of micro- and macroeconomics to the global economy. Topics include: theories of comparative economic systems, resource markets, trade policies, economic development, the international monetary system, and trade policies.
Prerequisites: ECO 1512 or ECO 1513 or instructor consent.

EET Electronic Engineering Technology

7001 Computer Concepts 1-2-2
An introductory course on computers. Topics include: hardware, disk operating systems, basic word processing, elementary programming. Required for all Engineering Technology pre-tech students unless specifically waived by the Dean of the Center for Innovative Technologies.
Prerequisites: None.

7007 Introduction to Electrical Engineering Technology 1-3-2
An introduction to fundamental measuring skills in the electrical field. Topics include: basic meter reading, oscilloscope use, software simulation use, and building basic analog and digital circuits.
Prerequisites: DE 0020 or appropriate placement test score.

7701 Electronic Fundamentals 1 3-3-4
A course on the basic laws of AC and DC electricity and their applications. Topics include: voltage, current, power distribution as applied to resistive circuits, instrumentation, measurement techniques, component testing, basic circuit construction, and troubleshooting.
Prerequisites: MAT 1162 or appropriate placement test score.

7705 Survey of Digital Systems 3-3-4
A study of digital combinational logic systems. Topics include: number systems, codes, review of Boolean algebra, logic families, logic simplification methods and implementation of logic equations using NAND and NOR gates, flip-flops, programmable logic arrays, and microprocomputer systems.
Prerequisites: None.

7706 Electrical Fundamentals for MET 2-3-3
An electrical fundamentals course for Mechanical Engineering Technology students. Topics include: voltage, AC and DC current, power, resistance, impedance, capacitance, inductance, parallel and series circuits, and using voltmeters, ammeters, and ohmmeters.
Prerequisites: MAT 1192.

7707 Survey of Analog Devices 3-2-4
A survey of analog devices for students in a non-engineering technology degree program. Topics include: operational characteristics and applications of capacitors, inductors, transformers, diodes, bipolar transistors, operational amplifiers, circuit construction, and troubleshooting.
Prerequisites: EET 7701.

7710 DC Circuit Analysis 5-0-5
An introduction to the concept of electricity. Topics include: current, voltage, resistance, and power; applying various laws and theorems to series, parallel, and series-parallel circuits; and network analysis using source conversions, Thevenin's, superposition, and maximum power transfer theorems. Students use circuit simulation software.
Prerequisites: MAT 1171 or appropriate placement test score.
Corequisites: MAT 1191 or MAT 1172, EET 7711.

7711 DC Circuits Lab 0-3-1
An introduction to circuit construction, measurement, and troubleshooting DC circuits. Topics include: proper techniques and use of instruments commonly used by technicians in theory verification and troubleshooting. Students use DC power supplies, VOMs, and DMM extensively throughout the course.
Prerequisites: None.
Corequisites: EET 7710.

7716 Computer Calculations for Electronics 3-3-4
A course on applying Microsoft Office Suite to solve problems in electronics applications. Topics include: solving circuit analysis and digital systems problems and designing presentations and laboratory reports with Microsoft Office. Students must have a working knowledge of Microsoft Office.
Prerequisites: CPET 7705 or CPET 7728 and EET 7710 or EET 7701.

7720 AC Circuit Analysis 5-0-5
An introduction to capacitance and inductance including transient circuit analysis. Topics include: AC waveforms; reactance; impedance; transformers; series, parallel, and series-parallel AC circuits, and applications of these circuits. Students use circuit simulation software.
Prerequisites: EET 7710, EET 7711.
Corequisites: MAT 1192, EET 7721.

7721 AC Circuits Lab 0-3-1
An introduction to the proper techniques and instruments commonly used by technicians in theory verification and troubleshooting AC circuits. Students use analog and digital oscilloscopes, signal generators, and frequency counters to construct circuits and measure AC electrical quantities.
Prerequisites: EET 7710, EET 7711.
Corequisites: EET 7720.

7728 Digital Combinational Logic 3-3-4
Topics include: number systems, codes, a review of Boolean algebra, logic families, logic simplification methods, and implementation of logic equations using NAND and NOR gates and flip-flops.
Prerequisites: MAT 1171 or appropriate placement test score.

7730 Electronics 1 5-3-6
A course on semiconductor theory. Topics include: an introduction to diode circuits and basic power supply circuits; transistor theory covering biasing and amplification; and small signal amplifiers including common-emitter, common-collector, and cascaded amplifiers. Students use circuit simulation software.
Prerequisites: EET 7720, EET 7721.

7733 Electrical Applications 3-2-4
A continuation of EET 7132, emphasizing the operation and control of solenoid-operated valves used in both hydraulic and pneumatic circuits. Topics include: basic electrical fundamentals, digital concepts, relay logic application, and ladder diagrams.
Prerequisites: MET 7132.

7736 Electrical Power Systems 4-2-4
A course on the articles of the National Electrical Code that apply to electrical systems. Topics include: transformer principles, three-phase systems, overcurrent devices, conductors, grounding, wiring methods, branch circuits, service entrances, load calculations, and special topics.
Prerequisites: None.

7738 Digital Sequential Logic 3-3-4
Topics include: edge-triggered circuitry, J-K flip-flops, sync and async counters, shift registers, clock circuits, monostable theory, encoders, decoders, multiplexing (time base) displays, and circuit design techniques using MSI ICs.
Prerequisites: EET 7728.

7740 Electronics 2 5-3-6
A continuation of EET 7730. Topics include: FET theory for JFET and MOSFET devices including amplifiers; operational amplifier theory including inverting and non-inverting amplifiers; inverting adder, differential, bridge, and instrumentation amplifiers; and single supply operation and comparators. Students use circuit simulation software.
Prerequisites: EET 7730.

EET Electronic Engineering Technology
EMS Emergency Medical Services

7748 Microprocessor Systems 1 **3-3-4**
A course on microprocessor hardware and software for the Motorola 68HC12 family of devices. Topics include: basic microprocessor hardware, number systems, software architecture, the 68HC12 instruction set, addressing modes, subroutines, serial and parallel ports, and simple serial data transmission.
Prerequisites: EET 7728.

7750 Electronics 3 **3-3-4**
A continuation of EET 7740. Topics include: triacs, SCRs, audio power amplifiers, sensors, control circuits, and advanced power supply design.
Prerequisites: EET 7740, EET 7738.

7751 EET Design Project **3-3-4**
Students work in teams to design a system using both analog and digital concepts. Topics include: design theory, feasibility study, engineering economics, and presenting and demonstrating prototype projects.
Prerequisites: EET 7740, EET 7748.
Corequisites: EET 7768.

7768 Microprocessor Systems 2 **3-3-4**
A continuation of EET 7748. Topics include: a study of microprocessor systems signals and timing; memory and I/O expansion techniques; interrupts; event processing; and micro application including keyboard input, display output, analog-to-digital input, and digital-to-analog output.
Prerequisites: EET 7748.

7771 Soldering and Cabling **1-2-2**
Topics include: soldering of printed circuit boards, standard parallel null modems, and RS232 cables; wire wrapping prototype circuits; crimping end connectors on coaxial cables; making telephone cables using RJ-11 connectors; and splicing fiber optic cable.
Prerequisites: None.

7778 Programmable Logic Devices **2-3-3**
A course on modern programmable logic devices. Topics include: combinational/sequential logic designs and implementation with ROM, FPLD, FPGA, and ASIC devices; examples of embedded digital circuitry for basic control systems; high speed support logic for modern microcontrollers and applications.
Prerequisites: EET 7730, EET 7738.

7779 Computer Repair: Basic **2-3-3**
A course on theory and operation of computer systems. Topics include: operating systems, interface of operating systems and hardware, CPU structures and evolution, bus structures, memory, data storage, input/output devices, motherboard structures, number systems, and serial/parallel data transmission.
Prerequisites: None.

7780 Computer Repair: General Systems **2-3-3**
A continuation of EET 7779. Topics include: demonstrations, lab exercises, diagnostic evaluations, and troubleshooting to the board/component level of personal computer systems using diagnostic software and instrumentation to isolate failures and restore systems to normal operation.
Prerequisites: EET 7779.

7781 Computer Repair: Advanced Systems **2-3-3**
A continuation of EET 7780. Topics include: specialized hardware peripherals and devices, system optimization, driver installation, and printer maintenance.
Prerequisites: EET 7780.

7799 Special Problems Seminar-Electrical **Var-Var-Var**
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair.
Prerequisites: Program chair consent.

EMS Emergency Medical Services

4730 CPR for Health Care Professionals **0-2-1**
Comprehensive Basic Life Support course for health care providers. Includes one and two rescuer CPR; adult, child and infant CPR; barrier devices; and AED. Students who successfully complete this course receive an AHA CPR for Health Care Professionals card.
Prerequisites: None.

4731 First Aid **0-2-1**
A basic first aid course. Topics include: recognizing and responding to emergencies and proper first aid for injuries, sudden illness, and medical emergencies. Students who successfully complete the course receive a First Aid card.
Prerequisites: None.

4733 CPR - Pediatric Basic Life Support **0-1-1**
An entry-level Pediatric Basic Life Support course for infant and child CPR. Topics include: choking and infant and child safety.
Prerequisites: None.

4734 Heartsaver AED-Adult **0-1-1**
A course for the lay responder on basic techniques of adult cardiopulmonary resuscitation (CPR) and using an automatic external defibrillator.
Prerequisites: None.

4735 BLS for Healthcare Providers **0-1-1**
A course for professionals who respond to respiratory and cardiac emergencies. Topics include: adult and pediatric CPR, AED, stroke, and barrier devices.
Prerequisites: None.

4736 Heart Saver First Aid **0-1-1**
A first aid course for the worksite rescuer. Topics include: general principles of first aid, medical emergencies, injury emergencies, adult CPR, and AED (automatic external defibrillator).
Prerequisites: None.

4737 ACLS Provider **0-2-1**
A course that provides knowledge and skills needed to evaluate and manage the first 10 minutes of an episode of ventricular fibrillation/ventricular tachycardia experienced by an adult.
Prerequisites: EMS 4735 or BLS Card or see instructor.

4738 Nurse/Paramedic Bridge Course **6-3-7**
A course that enables RNs with appropriate prerequisites to be eligible to take the National Registry of Emergency Medical Technician-Paramedic exam. Upon successfully completing the course and this exam, students are eligible to take the State of Ohio Paramedic Certification.
Prerequisites: Three years experience in ER/ICU within last five years, Ohio RN License, ACLS, BTLS, PeP, Ohio EMT.

4739 Pediatric Advanced Life Support **0-2-1**
Advanced life support care for the infant and child during the first 10 minutes of resuscitation efforts. Topics include: CPR for infant and child, airway management, drug management, and the use of an AED and defibrillator. Student must have completed or currently be enrolled in Paramedic, Nursing, or Respiratory technical courses.
Prerequisites: None.

4740 Paramedic Theory & Practice 1 **6-2-7**
A course that meets the objectives of the Preparatory Division of the US DOT EMT-Paramedic: National Standard Curriculum. Topics include introduction to ALS care, pathophysiology, anatomy and physiology of the respiratory system, basic and advanced airway management, pharmacology, and patient assessment.
Prerequisites: EMS 4761 or equivalent and State of Ohio EMT-B certificate.
Corequisites: EMS 4741.

4741 Paramedic Clinical Practice 1 **1-0-1**
A clinical orientation course. Topics include: orientation to the hospital emergency room, Advanced Life Support (ALS) runs, and paramedic equipment.
Prerequisites: State of Ohio EMT-B certificate.
Corequisites: EMS 4740.

4742 Paramedic Theory & Practice 2 **6-2-7**
A course that meets the objectives of the Preparatory Division of the US DOT EMT-Paramedic: National Standard Curriculum. Topics include: anatomy and physiology of the cardiovascular system; and assessment and management of the cardiac patient.
Prerequisites: EMS 4740 and EMS 4741 (minimum grade C for both).
Corequisites: EMS 4743.

4743 Paramedic Clinical Practice 2 **1-10-3**
A course on paramedic clinical practice. Topics include: ALS ride time, labor and delivery, and respiratory care in the hospital setting.
Prerequisites: EMS 4740, EMS 4741 (minimum grade C for both).
Corequisites: EMS 4742.

4744 Paramedic Theory & Practice 3 6-2-7
A course that meets the objectives of the Preparatory Division of the US DOT EMT-Paramedic: National Standard Curriculum. Topics include: GI/GU systems; nervous system; reproductive system; and hematology.
Prerequisites: EMS 4742, EMS 4743 (minimum grade C for both).
Corequisites: EMS 4745.

4745 Paramedic Clinical Practice 3 1-11-3
A course that provides paramedic clinical practice in real settings. Topics include: ALS ride time, hospital emergency room experience, and intubation rotation.
Prerequisites: EMS 4743 (minimum grade C).
Corequisites: EMS 4744.

4746 Paramedic Theory & Practice 4 6-2-7
A course that meets the objectives of the Preparatory Division of the US DOT EMT-Paramedic: National Standard Curriculum. Topics include: anatomy and physiology of the integumentary and musculoskeletal systems; assessment and management of the trauma patient; neontology; pediatrics; geriatrics; and ambulance operations.
Prerequisites: EMS 4744, EMS 4745 (minimum grade C for both).
Corequisites: EMS 4747.

4747 Paramedic Clinical Practice 4 1-12-4
A course that provides clinical rotations in real settings. Topics include: rotations in the emergency room, intensive care unit, pediatric emergency room, and ALS ride time.
Prerequisites: EMS 4744, EMS 4745 (minimum grade C for both).
Corequisites: EMS 4746.

4748 Paramedic Theory & Practice 5 6-2-7
A course that reviews the US DOT EMT Paramedic National Standard Curriculum.
Prerequisites: EMS 4746 and EMS 4747 (minimum grade C for both).
Corequisites: EMS 4749.

4749 Paramedic Clinical Practice 5 1-15-4
A course that provides clinical practice in authentic settings. Topics include: ALS ride time and hospital emergency room rotation.
Prerequisites: EMS 4746, EMS 4747 (minimum grade C for both).
Corequisites: EMS 4748.

4750 Heartsaver Pediatric First Aid/CPR 0-1-1
Pediatric first aid and layperson CPR for adult, infant, and child. Recommended for day care workers.
Prerequisites: None.

4751 Basic Trauma Life Support 0-2-1
A course for advanced EMTs, paramedics and trauma nurses who initially evaluate and stabilize trauma patients. Topics include: rapid assessment, resuscitation, packaging and transport of trauma patients and conditions that cannot be stabilized in the field and require immediate transport.
Prerequisites: EMS 4797 (minimum grade C), ACLS, updated EMT card.

4752 Emergency Critical Care 3-6-5
For the paramedic or registered nurse with at least two years of experience. Topics include: advanced skills used in the critical care environment for the stabilization and management of critically ill and/or trauma patients.
Prerequisites: Paramedic or registered nurse plus two years ACLS and BTLS.

4754 CPR and First Aid for Health Care Professionals 0-2-1
Comprehensive Basic Life Support and first aid for health care providers. Students who successfully complete this course receive an AHA CPR for Health Care Professionals card and First Aid card. Topics include: one- and two-rescuer CPR and AED for adult, child, and infant; barrier devices; resuscitator bags and first aid.
Prerequisites: None.

4755 CPR Heartsaver AED-Infant through Adult 0-1-1
Adult, child, and infant CPR for the layperson. Topics include: Adult CPR, child CPR, infant CPR, and AED use.
Prerequisites: None.

4760 Emergency Medical Technician Basic Training 1 3-5-5
A course that provides initial training for EMTs. Students must successfully complete EMS 4760 and EMS 4761 to take the National Registry Exam for EMT-B certification by the State of Ohio.
Prerequisites: DE 0011 or appropriate placement test score.

4761 Emergency Medical Technician Basic Training 2 3-5-5
A continuation of EMS 4760. Includes the curriculum's clinical component. Students must successfully complete EMS 4760 and EMS 4761 to take the National Registry Exam for EMT-B certification by the State of Ohio.
Prerequisites: EMS 4760 (minimum grade C).

4763 Paramedic Theory and Practice 1 6-4-8
A course on Part 1 of the National EMT-Paramedic curriculum. Topics include: airway and ventilation, general pharmacology, and management of respiratory emergencies.
Prerequisites: BIO 4016 or EMS 4762 (minimum grade C for both), EMT B Certificate.

4764 Paramedic Theory and Practice 2 5-14-12
A course on Part 2 of the National EMT-Paramedic curriculum. Topics include: patient assessment, medical emergencies, and management of cardiovascular emergency.
Prerequisites: EMS 4763 (minimum grade C).

4765 Paramedic Theory and Practice 3 7-6-10
A course on Part 3 of the National EMT-Paramedic curriculum. Topics include: the anatomy, pathophysiology, assessment, and management of trauma, burns.
Prerequisites: EMS 4764 (minimum grade C).

4766 Paramedic Theory and Practice 4 7-8-11
A course on Part 4 of the National EMT-Paramedic curriculum. Topics include: neontology, pediatrics, geriatrics, and ambulance operations.
Prerequisites: EMS 4765 (minimum grade C).

4767 Paramedic Theory and Practice 5 6-8-10
A course on Part 5 of the National EMT-Paramedic curriculum. Topics include: review of the National EMT-Paramedic curriculum, including ACLS, BTLS, and PEP.
Prerequisites: EMS 4766 (minimum grade C).

4768 EMT-Paramedic Field Experience-Internship 0-40-2
The student participates in an unpaid field learning experience 32-40 hours per week. The student must adhere to the Health and Public Safety Division Student Handbook and EMT-Paramedic program requirements.
Prerequisites: EMS 4766 (minimum grade C).

4769 EMT-Paramedic Field Experience-Cooperative Education 0-40-2
The student participates in a paid field learning experience 32-40 hours per week. The student must adhere to the Health and Public Safety Division Student Handbook and EMT-Paramedic program requirements.
Prerequisites: EMS 4766 (minimum grade C).

4770 Emergency First Responder 3-2-4
A course for those first on the scene at a medical emergency. This course follows the curriculum set by the Ohio Department of Public Safety Division of EMS, including airway management, CPR, AED, and illness and injury management.
Prerequisites: None.

4771 Basic EMT Refresher 3-2-4
A course that follows the curriculum set by the Ohio Department of Public Safety Division of EMS. Topics include: patient assessment, airway management and intubation, CPR, trauma, medical emergencies, pediatric emergencies, childbirth, anatomy and physiology of the heart, and geriatrics.
Prerequisites: Current Basic EMT card.

4772 EMT Paramedic Refresher 4-2-5
A refresher course for current paramedics. Topics include: patient assessment; cardiac, respiratory, and pediatric medical emergencies; EMS operations, and disaster and emergency planning. Follows the curriculum set by the Ohio Department of Public Safety Division of EMS.
Prerequisites: Current paramedic card.

4773 EMS Instructor's Course 2-5-3
A State of Ohio EMS Instructor's course. Topics include: teaching techniques for the adult learner, instructional techniques pertinent to the field of EMS, supervised teaching, and skills testing. Students must have five years in the EMS field at the current level and have achieved a minimum of 70% on the state knowledge test.
Prerequisites: None.

EMS Emergency Medical Services
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4782 Pediatric Education for Pre-hospital 1-2-2
The assessment of pediatric patients during pre-hospital emergencies. Topics include: techniques on how to approach, assess, and manage pediatric patients involved in trauma, cardiovascular, respiratory, and other life threatening circumstances; communications; packaging; and radio reporting.
Prerequisites: EMT Certificate.

4797 Paramedic Technology Special Studies Var-Var-Var
Study and special projects concerning Paramedic Technology open to State of Ohio certified paramedics wishing advanced standing for an Associate of Technical Studies degree in Paramedic Technology. This course is arranged with the approval of the Dean of Health and Public Safety.
Prerequisites: Certified Paramedic (State of Ohio) or approval of Dean of Health and Public Safety.

4798 EMS Special Studies Var-Var-Var
Study and special project/classes/training pertaining to Emergency Medical Services at the basic or paramedic level. This course is arranged with the approval of the Dean of Health and Public Safety.
Prerequisites: Prerequisite will vary depending upon course offered.

4799 EMS Special Studies Var-Var-Var
Study and special project/classes/training pertaining to Emergency Medical Services at the basic or paramedic level. This course is arranged with the approval of the Dean of Health and Public Safety.
Prerequisites: Prerequisite will vary depending upon course offered.

9362 Cooperative Education - EMS 0-40-2
The student participates in a paid field learning experience 32-40 hours per week. The student must adhere to the Health and Public Safety Student Handbook and EMS program requirements.
Prerequisites: EMS 4766 (minimum grade C).

EMT Electro-Mechanical Engineering Technologies

7003 Engineering Science Concepts 3-0-3
An introduction to the principles of engineering technology. Topics include: an overview of the various areas of engineering technology including units of measurement and basic formulas. Required for all Engineering Technology pre-tech students unless specifically waived by the Dean of the Center for Innovative Technologies.
Prerequisites: None.

7006 Introduction to Electro-Mechanical Engineering Technology 1-0-1
An introduction to Electro-Mechanical Engineering Technology (EMET) and the EMET program. Topics include: descriptions of the functions and jobs typically performed by electro-mechanical systems technicians, the knowledge and skills requirements of EMET field, industry standards and requirements, the EMET cooperative education and academic programs, and development of goals and of personalized academic/co-op plan to achieve the goals.
Prerequisites: None.

7146 Electro-Mechanical Controls 1 (Programmable Controllers-PLCs) 3-3-4
A course on power semiconductor devices used to control large industrial loads such as motors, heaters, and lighting systems. Topics include: transistors, thyristors, resistive loads, and signal and power line conditioning.
Prerequisites: EMT 7755.

7157 Electro-Mechanical Controls 2 (Servomechanisms) 3-3-4
A continuation of EMT 7146 emphasizing the concepts of negative feedback for closed-loop servo systems. Topics include: transducers for sensing system parameters; proportional (P), proportional-derivative (PD), and proportional-integral-derivative (PID) positional control systems; computer control of servo-control systems; and simple closed-loop control.
Prerequisites: CPET 7728, EET 7730.

7167 Robotics 1 2-2-3
An introduction to basic robotics concepts and factory automation. Topics include: analyzing industrial robotics applications in automated manufacturing environments, mechanical and electrical components, hands-on programming and operation of robots, selecting robots for industrial applications, quality assurance, and rigging.
Prerequisites: EMT 7730.

7755 Motors, Motor Controls and Variable Drives 3-3-4
A course on DC motors, single-phase and three-phase AC motors, motor controls and variable speed drives. Topics include: motors and control circuits; calculating speed, torque, horsepower, and efficiency; motor protection, failure, and troubleshooting; soft motor starters, stepper motors, DC variable speed drives, and AC variable frequency drives.
Prerequisites: EET 7720, EET 7721, EET 7728.

EMTR Electro-Mechanical Engineering Technology

7791 Electronic Devices for EMTRC 2-3-3
An overview of electronic devices for Renewable Energy certificate students. Topics include: DC circuits and motors, operational amplifiers, magnetics, and AC single phase motors.
Prerequisites: None.

7792 Energy Efficiency and Audits 2-3-3
A course on the fundamentals of energy efficiency and measurement. Topics include: conducting energy audits of homes and small businesses, energy efficiency and conservation, reducing energy consumption, and applying renewable energies.
Prerequisites: EET 7701 or EET 7707 or EET 7710 or EMTR 7791.

7793 Fuel Cell Devices 2-3-3
A course on the fundamentals of fuel cell technology. Topics include: conversion of chemical energy to electricity; components of a fuel cell; power efficiencies; fuel cell applications such as batteries, portable generators, and motors; and transportation.
Prerequisites: EMTR 7792.

7794 Photovoltaic and Wind Devices 4-3-5
A course on the fundamentals of photovoltaic and wind devices. Topics include: photovoltaic (solar) electrical systems; passive solar; wind turbines; and system cost, sizing, installation, and maintenance; and practical applications.
Prerequisites: EMTR 7792.

7891 Introduction to Weatherization 1-2-2
An overview of weatherization skills required to become an energy auditor. Topics include: terminology, energy principles, and building envelope basics.
Prerequisites: MAT 1161 or appropriate placement test score.

7893 Home Energy Systems 1-3-2
An overview of home energy systems required to be an energy auditor. Topics include: digital multimeter and watt meter reading, duct testing air blower system, blower door, and thermal imaging.
Prerequisites: EMTR 7792 or instructor consent, EET 7701, EET 7710, EET 7791.

7894 Duct Testing and Blower Systems 0-2-1
A training course on duct testing air blower systems. Topics include: duct tester basics, duct testing air blower system setup, and data collection and analysis.
Prerequisites: None.

7895 Blower Door Systems 0-2-1
A training course on blower door systems. Topics include: blower door basics, blower door set-up, and data collection and analysis.
Prerequisites: None.

7896 Thermal Imaging Devices 0-2-1
A training course on thermal imaging cameras. Topics include: thermal camera set-up, thermal imaging techniques, and data collection and analysis.
Prerequisites: None.

7897 Indoor Air Quality Monitoring 0-2-1
A training course on air quality monitoring devices. Topics include: carbon monoxide meter, portable indoor air quality meter, and data collection and analysis.
Prerequisites: None.

END Electroneurodiagnostic Technology

4200 Introduction to Electroneurodiagnostic Technology 3-0-3
An overview of the electroneurodiagnostic (END) profession and the technologist's role in the health care delivery system. Topics include: the professional environment, END testing procedures, and ensuring a safe recording environment for patients.
Prerequisites: BIO 4016, BIO 4009 (minimum grade C for both).

4201 Introduction to Neuroscience 2-2-3
An introduction to the anatomy and physiology of the nervous system. Topics include: medical terminology, neuroanatomy, neurophysiology, brain wave activity, extra-physiological artifacts, seizure manifestations, classification, medication, and EEG correlations.
Prerequisites: BIO 4016, BIO 4009 (minimum grade C for both).

4210 EEG Instrumentation and Recording 2-2-3
A course on the recording concepts for performing routine electroencephalography (EEG). Topics include: national standards for performing electrode application; EEG analog/digital instrumentation; awake and sleep EEG for neonatal, pediatric, and adult recording; recognizing extra-physiological artifacts; and electro-cerebral inactivity.
Prerequisites: END 4200, END 4201 (minimum grade C for both).

4220 EEG Laboratory Management 2-2-3
A course on END laboratory protocols. Topics include: standard and transmission-based precautions, recognizing patient needs, responding to life-threatening situations, sedation, emergency and disaster preparedness, hazardous material handling, electrical safety, medical ethics, and confidentiality issues.
Prerequisites: EMS 4730, END 4210 (minimum grade C).

4221 EEG Clinical Correlations 2-0-2
A course on correlating the EEG with signs and symptoms of neurological/neurosurgical disorders. Topics include: reviewing neurological/neurosurgical disorders, recognizing normal and abnormal awake/asleep EEG patterns at each age, using the library for research, and using scientific methodology in case presentations.
Prerequisites: END 4210 (minimum grade C).
Corequisites: END 4222.

4222 EEG Directed Clinical Practice 0-16-2
Supervised practical application of EEG/END skills at an assigned clinical site. Topics include: basic competency in instrumentation, recording, laboratory management, and clinical correlation. Students are required to present case studies and storyboard presentations. Evening/night clinical rotations may be required.
Prerequisites: END 4210 (minimum grade C).
Corequisites: END 4221.

4230 Introduction to Evoked Potential 2-0-2
A course on auditory, visual, and somatosensory evoked potentials. Topics include: principles of stimulation, placement of recording electrodes, measurement of waveform amplitude and latency, criteria for significant waveform changes, near and far field potentials, and common artifact troubleshooting and removal.
Prerequisites: END 4220, END 4221, END 4222 (minimum grade C for all).
Corequisites: END 4231, END 4232.

4231 Evoked Potential Clinical Correlations 2-2-3
A course on anatomy, physiology, and pathology of selected sensory organs, nerves and nerve pathways associated with evoked potentials. Topics include: evoked potential generators, clinical correlations, and causes of waveform abnormalities including medications and other physiological variables.
Prerequisites: END 4222 (minimum grade C).
Corequisites: END 4230, END 4232.

4232 Evoked Potential Directed Clinical Practice 0-16-2
Supervised practical application of evoked potential skills at an assigned clinical site. Topics include: instrumentation/recording of evoked potentials and student presentation of visual, auditory, and upper/lower somatosensory evoked potential. Evening/night clinical rotations may be required.
Prerequisites: END 4222 (minimum grade C).
Corequisites: END 4230, END 4231.

4240 Intraoperative Monitoring 1-0-1
A course on intraoperative monitoring with EEG, evoked potentials and neuromuscular monitoring. Topics include: indications for studies, criteria for significant changes, artifact identification/removal, effects of anesthetic agents, operating room procedures/protocol, and communication of waveform changes to the physicians.
Prerequisites: END 4232 (minimum grade C).
Corequisites: END 4241.

4241 Intraoperative Monitoring Directed Clinical Practice 0-16-2
Supervised practical application of electroneurodiagnostic skills at an assigned clinical site. Topics include: intraoperative instrumentation and monitoring, clinical correlations, and assessment of effects of physiological variables on monitoring results. Evening/night clinical rotations may be required.
Prerequisites: END 4232 (minimum grade C).
Corequisites: END 4240.

4250 EEG Long-term and Invasive Monitoring 1-0-1
A course on the indications and methodologies for long-term monitoring. Topics include: long-term monitoring instrumentation; ambulatory EEG; inpatient video/EEG for epilepsy with scalp and intracranial electrodes; seizure and non-epileptic event recognition; patient interaction; and medical, surgical, and psychiatric treatment options.
Prerequisites: END 4240, END 4241 (minimum grade C for both).
Corequisites: END 4251.

4251 Long-term and Invasive Monitoring Directed Clinical Practice 0-16-2
Supervised practical application of electroneurodiagnostic skills at an assigned clinical site. Topics include: instrumentation and recording, long-term and invasive monitoring, patient interaction during events, customized recording, cortical evoked potentials and stimulation, and clinical correlations. Evening/night clinical rotations may be required.
Prerequisites: END 4240, END 4241 (minimum grade C).
Corequisites: END 4250.

4260 END Board Exam Review 1-0-1
A review of topics in preparation for the American Board of Registration in Electroneurodiagnostic Technology (ABRET) exam. Topics include: sequential review of all theory and clinical correlations, procedural skills, and ethics. Students must register for the exam by March of their graduating year.
Prerequisites: END 4250, END 4251 (minimum grade C for both).

4261 END Clinical Capstone 0-16-2
Supervised practical application of electroneurodiagnostic skills in EEG and evoked potentials at an assigned clinical site. Students practice all aspects of the field, functioning in the role of END technologist. Students deliver a presentation summarizing the cognitive (knowledge), psychomotor (technical application) skills, and affective (behavioral) skills applied to EEG and EP testing in END.
Prerequisites: END 4250, END 4251 (minimum grade C).

4898 Special Studies in END Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

4899 Special Studies in END Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

ENG English

1001 English Composition 1 3-0-3
An introduction to the composition process. Topics include: prewriting, drafting, revising, editing, identifying audiences, and developing a strong thesis that results in a unified and coherent essay with grammatical, mechanical, and stylistic correctness.
Prerequisites: DE 0005, DE 0011 or appropriate placement test score

1002 English Composition 2 3-0-3
A continuation of ENG 1001. Topics include: further development of writing skills emphasizing critical reading, reasoning, and argumentation; the research process; and the research paper.
Prerequisites: ENG 1001.

1003 English Composition 3 3-0-3
A continuation of ENG 1002 including advanced practice of the principles of good writing, emphasizing reading and responding critically to works of literature.
Prerequisites: ENG 1002.

1009 Business English 3-0-3
A course on current practices in business communication. Topics include: composing various types of business-related documents; achieving accuracy in grammar; mechanics; usage; spelling; and syntax.
Prerequisites: ENG 1002.

ENG English
EVET Environmental Engineering Technology

1010 Technical Writing 1 **3-0-3**
A course on the principles and practices of composing various types of professional and technical communication. Topics include: audience analysis, planning and preparing documents used for reference or instruction, and integrating visuals with text. Students who register for this course should also register for an upper level course in their degree program.
Prerequisites: ENG 1002 and 12 hours in technical area.

1011 Business Communications **4-0-4**
A course on the principles and practices of composing various types of business correspondence. Topics include: the drafting and revision process, development of style, internal and external communications, formal and informal business letters, emails, proposals, and reports.
Prerequisites: ENG 1001 or equivalent.

1015 Technical Writing 2 **3-0-3**
A continuation of ENG 1010. Topics include: selecting, organizing, and presenting materials in written and oral reports for professional and technical audiences; preparing surveys, proposals, lab reports, and other job-related reports. Students who register for this course should also register for an upper-level course in their degree program.
Prerequisites: ENG 1010.

1018 Professional Writing Styles 1 **2-2-3**
Study and practice of the conventions, styles, and structures of professional nonfiction writing. Topics include: principles of economy, emphasis, clarity, and correctness in planning, composing, and revising prose. Technical Communication degree or certificate students must earn a grade of B or higher.
Prerequisites: ENG 1001 or Technical Communication program chair consent.

1019 Professional Writing Styles 2 **2-2-3**
A continuation of ENG 1018. Topics include: concreteness, unity, coherence, and variety in planning, composing, and revising prose and preparing research-based materials. Technical Communication degree or certificate students must earn a grade of B or higher.
Prerequisites: ENG 1018 or Technical Communication program chair consent.

1036 Creative Writing: Poetry **3-0-3**
An introduction to the art of writing poetry. Topics include: the invention process, revision, poetic form, and critical response to professional and student works. Students must submit a portfolio of finished work.
Prerequisites: Nine hours of English composition.

1037 Creative Writing: Short Fiction **3-0-3**
An introduction to the art of writing short fiction. Topics include: the invention process, revision, narration, dialogue, characterization, plot, story development, point of view, and critical response to professional and student works. Students must submit a portfolio of finished work.
Prerequisites: Nine hours of English composition.

1038 Creative Writing: Non-Fiction **3-0-3**
An introduction to the art of writing creative expository prose. Topics include: the invention process, revision, biography, memoir, journal writing, journalistic writing, travel and nature essays, and critical response to professional and student works. Students must submit a portfolio of finished work.
Prerequisites: Nine hours of English composition.

1039 Creative Writing: Writing for Children **3-0-3**
An introduction to the art of writing for children. Topics include: the invention process, revision, narration, dialogue, characterization, and plot. Genres include: picture books, easy readers, chapter books, and middle grade novels. Students must submit a portfolio of finished work.
Prerequisites: Nine hours of English composition.

ESL English as a Second Language

0060 English as a Second Language Level 1 **4-0-4**
An intermediate course that integrates listening, reading, grammar, and writing skills. Topics include: cross cultural issues and difficulties facing new immigrants.
Prerequisites: None.

0061 English as a Second Language Level 2 **4-0-4**
An advanced course which integrates speaking, listening, reading, grammar, and writing skills. Topics include: various American social issues.
Prerequisites: ESL 0060 or appropriate placement test score.

0063 English as a Second Language Conversation **2-0-2**
A course that covers speaking and listening skills using a variety of simulated situations. Topics include: American culture and issues facing new immigrants.
Prerequisites: None.

0064 English as a Second Language Advanced Writing **4-0-4**
An advanced writing course for Limited English Proficient (LEP) students to prepare for college level composition courses. Topics include: writing process, organization, grammar and mechanics, and sentence structure.
Prerequisites: ESL 0061 or appropriate placement test score.

ET Engineering Technologies

7004 Technical Problem Solving Seminar **2-0-2**
A course on problem solving skills for engineering majors. Students use exercises to improve logic and reasoning skills and practice the five basic strategies used in technical problem solving.
Prerequisites: None.
Corequisites: MAT 1161 or DE 0024.

7005 Introduction to Engineering Technology **2-3-3**
A course on the engineering technology profession. Topics include: the history of engineering, engineering disciplines, materials, ethics, project management and teamwork, innovation, and design.
Prerequisites: DE 0010 and DE 0003, or appropriate placement test scores.

7099 Special Studies - Engineering Technologies **Var-Var-Var**
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Students must make special arrangements with the instructor and program chair. Students may substitute this course for technical elective credits.
Prerequisites: None.

9300 Technology Career Preparation **1-1-1**
A course that assists students to prepare for employment in Information and Engineering Technology Careers. Topics include: a self inventory of personal attributes, career exploration activities, job search and interviewing techniques, and skills that benefit job performance.
Prerequisites: None.

EVET Environmental Engineering Technology

7015 Introduction to Environmental Topics **1-2-2**
Topics include: basic concepts and terminology associated with environmental science, environmental problems, regulations, and solutions.
Prerequisites: DE 0020 (minimum grade B) or appropriate mathematics placement test score.

7600 Introduction to Environmental Engineering Technologies **3-0-3**
Topics include: the fundamentals of environmental engineering technologies and key environmental concepts.
Prerequisites: None.

7601 Industrial Waste Treatment **3-2-4**
A course on the responsibilities of the industrial wastewater treatment plant operator. Topics include: the activated sludge process, physical-chemical treatment, instrumentation, industrial waste monitoring, waste treatment processes, and maintenance.
Prerequisites: EVET 7646 or instructor consent.

7602 Supervisory Management in the Environmental Field **3-2-4**
Concepts and practices of management as they apply to the environmental field. Topics include: problem solving, communication skills, delegation and motivation, planning and organization, and manager-employee relationships.
Prerequisites: None.

7603 Operation of Wastewater Treatment Plants **3-2-4**
A course on efficient operation of wastewater treatment plants. Topics include: start-up, daily operations, interpretation of lab results, and possible approaches to solving operational problems. The course helps students prepare for certification examinations.
Prerequisites: EVET 7646 or instructor consent.

7604 Water Treatment Plant Operations 3-2-4
A course on efficient operation of water treatment plants. Topics include: proper installation, inspection, operation, maintenance, repair, and management of water treatment plants; corrosion control; control of trihalomethanes; and water sample analysis. The course helps students prepare for certification examinations.
Prerequisites: EVET 7646 or instructor consent.

7605 Environmental Statistics 3-2-4
A hands-on, computer lab-intensive course on basic statistical methods used in environmental pollution monitoring. Emphasizes environmental statistics as a physical science, not just as a mathematical science.
Prerequisites: MAT 1191 (minimum grade C) or equivalent.

7607 Environmental Sampling 2-3-3
Following lectures on sampling requirements and techniques, students sample groundwater, surfacewater, drums, sediments, soil, and air.
Prerequisites: None.

7608 OSHA-40 Hour Course 3-3-4
Students complete the OSHA-specific requirements under 29 CFR 1910.120 for 40-Hour Hazardous Waste Site Training, and receive a certificate of training upon successful completion. Topics include: how to avoid injury on an uncontrolled hazardous waste site and the basis for health and safety programs.
Prerequisites: None.

7609 Fundamentals of Industrial Hygiene 3-2-4
An overview of the principles of industrial hygiene. Topics include: techniques for recognizing, evaluating, and controlling health and safety hazards in the workplace; radiation safety; noise; solvents; biological hazards; and video display terminal hazards.
Prerequisites: None.

7610 Radiation Safety 3-2-4
An introduction to radiation safety and protection principles. Topics include: the interaction of radiation with matter, radiation's biological effects and types of radioactivity, dosimetry, radiation protection criteria, shielding calculations and radiation measurement.
Prerequisites: None.

7611 Risk Assessment in Environmental Management 3-0-3
A course on how risk assessment is used for solid waste management, hazardous waste/superfund sites, water and wastewater, and biological and ecological issues. Real-world case studies illustrate the risk assessment process.
Prerequisites: None.

7612 Environmental Microbiology 3-3-4
A course on microbiology of air, solid and hazardous waste, soil, water, and wastewater. Topics include: genetically engineered microbes; bioremediation; microbial disinfection; microbes as indicators of pollution; and analysis of water and wastewater, soils, solid waste, and aerosols.
Prerequisites: EVS 7622 or BIO 4072.

7613 Environmental Surveying & Drafting 3-3-4
An introductory course in field measurement techniques and surveying drafting. Topics include: contour maps, cross sections, grading plans, volume calculations, and boundary plats.
Prerequisites: None.

7614 Basic Mechanics of Fluids 3-3-4
Topics include: engineering properties of fluids including fluid flow, buoyancy, and stability; Bernoulli's equation and the energy equation; Reynold's number; energy losses; and series, parallel, and open channel flow. Students use lab time for problem solving, experimentation, and field applications.
Prerequisites: MAT 1192 or MAT 1173; PHY 2291 or PHY 2295.
Corequisites: MAT 1154, PHY 2292.

7616 Environmental Chemistry 2-3-3
A course on chemical principles of environmental systems. Topics include: the applications of chemical instrumentation such as gas chromatography, liquid chromatography, and atomic absorption to environmental measurements in air, water, wastewater, and solid waste.
Prerequisites: CHE 2232 or CHE 2253 or CMT 6631.

7617 Environmental Mountain Ecology 1 2-0-2
Topics include: principles of ecology and pollutant dispersion as they pertain to mountain ecosystems and environmental impact of human activities.
Prerequisites: EVS 7623 or EVET 7607.

7618 Environmental Mountain Ecology 2 0-6-2
A continuation of EVET 7617. An intensive field experience that includes a trip to the mountainous regions of the western United States. Students pay for the trip.
Prerequisites: EVET 7617.

7619 Restoration Ecology: Sustainable Sites 2-2-3
A course on concepts and practices of ecological restoration. Topics include: environmental design principles; sustainable development; federal, state, and local issues and standards; and managing introduced, exotic, and invasive species. Course requires off-campus field experiences.
Prerequisites: DE 005, DE 0011, or appropriate placement test scores.

7620 Restoration Ecology: Rain Gardens 2-2-3
A course on rain garden design and construction techniques that harvest rain water from residential and commercial watersheds. Topics include: baseline analysis, site preparation, plant choices and availability, and a study of the native and non-native components of various ecoregions. Course requires off-campus field experience.
Prerequisites: DE 0005, DE 0011, or appropriate placement test scores.

7625 Restoration Ecology: Native Vegetation 2-2-3
A course on native trees, shrubs, and vines that have commercial value for sustainable use. Topics include: proven landscape species and their successful uses in the Tri-State area and invasive trees, shrubs, and vines of various ecoregions. Course requires off-campus field experiences.
Prerequisites: DE 0005, DE 0011, or appropriate placement test scores.

7626 Environmental Mapping 3-3-4
A course on resource inventory and mapping methods for stormwater systems. Topics include: basic surveying, map coordinate systems, GIS, GPS, remote sensing, and data collection and analysis.
Prerequisites: CET 7635, MAT 1191 or MAT 1172.

7628 Watershed Management 2-3-3
A course on developing watershed action plans including economic redevelopment and brownfield development. Topics include: water quality monitoring, riparian zone restoration, stream bank stabilization, flood management strategies, habitat restoration, control of combined sewer overflow, and sanitary sewer overflow.
Prerequisites: CHE 2231.
Corequisites: EVET 7676.

7630 Stormwater Management 3-2-4
A course focusing on the infrastructure of stormwater control. Topics include: hydrologic cycle, historical development of drainage control, FEMA and local flood design criteria and control methods, storm sewer, open channel, culvert conveyance, detention systems and calculations, post construction, and best management practices.
Prerequisites: EVET 7626.

7632 Stormwater Management Technologies 3-3-4
A capstone course on recommended practices in stormwater management including installation, construction, and maintenance. Topics include: porous pavements, subsurface infiltration, infiltration trench, bioretention basins, weed management, stormwater wetlands, soil bioengineering systems, methods to remove contaminants of concern, cost effectiveness of methods.
Prerequisites: EVET 7630.

7640 Introduction to the Wastewater Industry 2-2-3
A introduction to the wastewater industry. Topics include: terminology; physical, biological, and chemical units used in calculations; current issues; environmental and human health issues; and scientific and engineering principles and applications.
Prerequisites: None.

7643 Calculations for Water Treatment Operators 2-3-3
A course on calculations for water treatment applications. Topics include: applied volume, flow and velocity, chemical dosage, loading rates, detention and retention, pumping, mathematical applications for water treatment plant processes, including water sources and storage, coagulation and flocculation, sedimentation, filtration, chlorination, fluoridation, softening, and laboratory basics.
Prerequisites: MAT 1191.

7644 Calculations for Wastewater Operators 2-3-3
Topics include: the calculation of volumes, flow and velocity, conversions, pumping rates, loading rates, F/M ratio, sludge age, MCRT, and efficiency and percentage calculations.
Prerequisites: MAT 1191.

EVET Environmental Engineering Technology
FIN Finance

7646 Water & Wastewater Technology 3-2-4
A course on scientific and engineering principles and applications in water quality control. Topics include: concepts and practices in the treatment of industrial and domestic wastewater before discharge to either municipal POTW or the environment, and principles and design of physical, chemical, and biological units in the treatment plant.
Prerequisites: CHE 2200 or CHE 2231.

7647 Collection & Distribution Systems 2-3-3
An introduction to operating and controlling water delivery and wastewater collection systems. Topics include: gravity and pumped lines; storage and holding tanks; pumps; system monitoring, repair, and rehabilitation; water system depressurization, back-flow prevention, and metering; wastewater system sewer overflows; and gaseous buildup.
Prerequisites: EVET 7614.

7648 Utilities Safety & Security 3-2-4
A course on the nation's utility systems. Topics include: drinking water safety and security, wastewater treatment facilities, and energy suppliers.
Prerequisites: EVET 7646 or Class I Operator's License.

7670 Regulations & Permits 2-3-3
An introduction to federal, state, and local environmental laws with emphasis on related computer applications. Topics include: TSCA, FIFRA, OSHA, CAA, CWA, SDWA, CERCLA, and RCRA. Students write a research paper and give a presentation using appropriate software.
Prerequisites: None.

7671 Air Pollution Control 3-3-4
A course on permitting and control of air releases. Topics include: air quality management, health and environmental effects, indoor air pollution, pollen and mold counts, control and sampling equipment, stack testing, and data analysis.
Prerequisites: None.

7672 Advanced Sampling & Analysis 2-3-3
A continuation of EVET 7607. Topics include: sampling equipment and methods used to evaluate hazards after natural disasters such as hurricanes, floods, tornadoes, and equipment and instruments used to detect biological and chemical warfare agents.
Prerequisites: EVET 7607, EVET 7612.

7675 Solid Waste Management 2-3-3
An introduction to the solid waste problem. Topics include: various methods and basic design concepts of solid waste disposal techniques, landfills, incineration, composting, recycling, and emerging technologies in this field.
Prerequisites: None.

7676 Hazardous Waste Management 2-3-3
Topics include: the origin of hazardous materials and their impact on humans, plants, and animals; principles and practices in the sampling, storage, transport, treatment, and disposal of hazardous wastes; and governmental regulations and permits pertaining to hazardous wastes.
Prerequisites: None.

7677 Treatment Technologies 2-3-3
An overview of the basic principles and applications of mainstream treatment and monitoring technologies used to prevent, monitor, and control pollution by industries and government agencies. Topics include: physical, chemical, and biological treatment methods.
Prerequisites: CHE 2231.

7680 Environmental Regulations for Fire Science Technology 1-3-2
An introduction to federal, state, and local environmental laws and ordinances controlling waste disposal, wastewater discharge, air releases, and hazardous materials handling, storage, transport, and disposal. Regulations covered include: TSCA, FIFRA, OSHA, CAA, CWA, SDWA, CERCLA, RCRA and HMTA.
Prerequisites: None.

7681 Advanced Environmental Risk Assessment 3-3-4
A course that utilizes risk assessment methods to evaluate and manage danger in the event of chemical, biological, or radiological exposure. Topics include: Operational Risk Management approaches and understanding toxicological values.
Prerequisites: EVET 7671, EVET 7676.

7682 Materials Transportation Safety and Security 3-0-3
A course on safety and security during the transport of hazardous substances and other materials in the United States. Topics include: The Hazardous Materials Transportation Act of 1975 (HMTA), The Resource Conservation and Recovery Act (RCRA), The Transportation Security Administration (TSA), aviation security policies and procedures, and shipping protocols including hazardous waste manifests.
Prerequisites: None.

7683 Environmental Impact of Weapons of Mass Destruction 2-2-3
A course that describes weapons of mass destruction and recovery following an attack. Topics include: chemical and biological warfare agents, Radiation Dispersal Devices, and the detection, decontamination, and disposal of these agents.
Prerequisites: EVET 7612.

7699 Special Problems Seminar - Environmental Var-Var-Var
Individual and independent study and special projects pertaining to the particular program in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Students must make special arrangements with the instructor and program chair.
Prerequisites: Program chair consent.

EVS Environmental Engineering Technology

7622 Environmental Science: Conservation and Clean-up 3-2-4
A course on the fundamentals of environmental science as it pertains to human activity and the resulting environmental impact. Topics include: conservation, water treatment, air pollution control, energy, and solid and hazardous waste management issues.
Prerequisites: None.

7623 Environmental Geology 3-2-4
An introduction to the relationship of applied geology to the human environment. Topics include: an overview of geologic concepts and terminology, groundwater hydrogeology, human responsibility to protect these resources from contamination, the geologic aspects of environmental health, land use practices, and resource exploitation.
Prerequisites: None.

7624 Environmental Science: Ecology and Ecosystems 3-2-4
A course on fundamental principles of environmental science and ecology. Topics include: the types of ecosystems and how they function, elementary soil science, biodiversity, and issues of population growth and sustainability.
Prerequisites: None.

FIN Finance

1804 Risk & Insurance 3-0-3
A course on the concept of risk in the business enterprise. Topics include: the need for insurance protection against risks in areas of property and liability, casualty, fire, life, and health; fundamentals of insurance contracts; and selecting insurers.
Prerequisites: None.

2960 Business Finance 3-0-3
An introduction to financial institutions, markets, and management. Topics include: the U.S. financial system and how business uses this system to finance operations for short, intermediate, and long terms.
Prerequisites: ACC 2912 or ACC 2926.

2961 Personal Finance 3-0-3
A course on coordinated, realistic, personal financial planning. Topics include: buying insurance, homes, and investment property; accumulating capital; retirement planning; estate planning; and individual and investment tax planning.
Prerequisites: None.

2962 Principles of Investments 1 3-0-3
A course on the role and scope of investments in the economy. Topics include: investment markets and transactions, online investing information and trading, investment return and risk, modern portfolio concepts, common stock valuation, and trading decisions.
Prerequisites: FIN 2960.

2968 Principles of Investments 2 3-0-3
A continuation of FIN 2962. Topics include: bond investments, preferred stock and convertible securities, mutual funds, portfolio administration, options, and futures.
Prerequisites: FIN 2962 or program chair consent.

2976 Financial Institutions 3-0-3
A course on the services, pricing techniques, goals and objectives, management styles, internal problems and risks, and markets in which financial institutions operate.
Prerequisites: None.

FRN French

1060 Elementary French 1 4-0-4
An introduction to the French language providing the foundation for understanding, speaking, reading, and writing French. Topics include: fundamentals of French intonation, grammar, and syntax. Laboratory work may be required.
Prerequisites: None.

1061 Elementary French 2 4-0-4
A continuation of FRN 1060 providing the foundation for understanding, speaking, reading, and writing French. Topics include: fundamentals of French intonation, grammar, and syntax and more advanced readings. Laboratory work may be required.
Prerequisites: FRN 1060 or one year of high school French or equivalent.

1062 Elementary French 3 4-0-4
A continuation of FRN 1061 providing the foundation for understanding, speaking, reading, and writing French. Topics include: fundamentals of French intonation, more complex grammar and syntax, advanced readings, and basic composition. Laboratory work may be required.
Prerequisites: FRN 1061 or two years high school French or equivalent.

1063 Intermediate French 1 4-0-4
A review and extension of basic principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and short literary pieces. Laboratory work may be required.
Prerequisites: FRN 1062 or three years high school French or equivalent.

1064 Intermediate French 2 4-0-4
A continuation of FRN 1063, providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: FRN 1063 or equivalent.

1065 Intermediate French 3 4-0-4
A continuation of FRN 1064, providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: FRN 1064 or equivalent.

FST Fire Service Technology

4741 Invisible Dangers in the Fire Service 3-0-3
An introduction to atmospheric monitoring equipment. Topics include: use and maintenance of monitoring equipment, specialized equipment used with hazardous materials, WMD, terrorist incidents, research materials, and field experience. The course and materials meet NFPA 471 and NFPA 472 standards.
Prerequisites: FST 4784 (minimum grade C).

4742 Fire Alarm Basics 3-0-3
A course on basic knowledge of fire alarm systems. Topics include: components of a basic system, operation and application of systems, building codes, and regulatory standards.
Prerequisites: None.

4743 Fire and EMS Instructor 1 & 2 5-2-6
A course that prepares students as fire instructors in compliance with NFPA 1041, Professional Qualifications for Fire Instructor. Students must have five years experience as a firefighter or EMT/Paramedic. Topics include: implementing lesson plans, exploring teaching techniques, lecture/lab preparation, and use of training aids.
Prerequisites: Instructor consent.

4745 Fire Officer 2 4-0-4
A course that prepares students for NFPA 1021 Fire Officers Professional Qualifications Level 2. Topics include: human resource management in the fire service, community and government relations, inspections, investigations, emergency service delivery and safety.
Prerequisites: FST 4786 (minimum grade C).

4746 Fire Officer 3 4-0-4
A course that prepares students for NFPA 1021 Fire Officers Professional Qualifications Level 3. Topics include: human resource management in the fire service, community and government relations, inspections, investigations, emergency service delivery and safety.
Prerequisites: FST 4745 (minimum grade C).

4747 Fire Behavior and Combustion 3-0-3
A course that explores the theories and fundamentals of how and why fires start and spread and how they are controlled.
Prerequisites: None.

4748 Principles of Emergency Services 3-0-3
A course exploring fire protection as an industry. Topics include: philosophy and history of fire, the fire department as part of the local government, protection systems, regulations, laws, and an introduction to fire ground strategy and tactics.
Prerequisites: None.

4749 Home Safety 1-0-1
A course that identifies common hazards that place individuals and families at a potential risk for injury and/or crisis. Topics include: fire safety, health hazards, general home safety tips, and child safety.
Prerequisites: None.

4750 Portable Fire Extinguisher Training 1-0-1
A course that explores the elements of fire and fire extinguishing. This is a hands-on course for anyone wishing to learn how to use a fire extinguisher. Topics include: the four elements needed to support a fire, types of fires, fire extinguisher demonstration and hands-on practice for quick and efficient extinguishment of class A, B, and C type fires.
Prerequisites: None.

4751 Fireground Operations 3-6-5
A course on truck and engine company operations. Topics include: command and control, reading the scene, self rescue, thermal imaging, rapid intervention, air monitoring and search techniques, and evaluating fire service tools and equipment.
Prerequisites: FST 4784 (minimum grade C).

4753 Fire Investigation 1 4-0-4
A course on principles and methodology used during the investigation process for structural and vehicular fires. Topics include: fire dynamics and theory, diagramming, and scene photography.
Prerequisites: None.

4754 Fire Investigation 2 4-0-4
A continuation of FST 4753, focusing on principles and techniques used to produce a sound investigation. Topics include: electrical fires, fire injuries and deaths, laboratory services, interviewing techniques, and arson crime analysis.
Prerequisites: FST 4753 (minimum grade C).

4757 Fire Service Engines/Vehicle Maintenance 2-2-3
A course covering basic operation, maintenance, and repair of internal combustion engines. Topics include: small gas power engines used in the fire service, daily inspections of fire apparatus, and equipment.
Prerequisites: None.

4760 Fire Cadet Basic Training 2-2-3
A course that prepares new students for fire training. Topics include: CPR for the Health Care Provider, drill and ceremony, self-discipline, personal safety, HIPAA, professional qualifications of the firefighter, radio communications, NFPA 1500, and the Incident Management System.
Prerequisites: Successful completion of Fire Cadet Fitness Evaluation.

4762 Fire Protection Systems 3-0-3
A course on design and operation of fire alarm systems. Topics include: water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection, and portable fire extinguishers.
Prerequisites: None.

4763 Fire Protection Hydraulics and Water Supply 3-0-3
A course on physics of water as it relates to fire control. Topics include: analyzing water supply problems, water movement and hydraulic principles, and overcoming the challenges of applying sufficient water for suppression.
Prerequisites: None.

FST Fire Service Technology
FYE First Year Experience

4764 Fire Prevention 3-0-3
The study of the history and philosophy of fire prevention. Topics include: fire codes, identification and correction of fire hazards, fire protection systems, fire investigation, operations of a fire prevention bureau, and fire and life-safety education.
Prerequisites: None.

4765 Emergency Vehicle Operator 1-2-2
A course on safe driving practices while responding in emergency vehicles. Topics include: postcollision analysis, unsafe practices during emergency response, and techniques for safe operation. Students must hold a valid driver's license.
Prerequisites: Instructor consent and valid driver's license.

4772 Fitness for Fire Service Professionals 0-3-1
An exercise course pertaining directly to the fire service. Topics include: avoiding common fire service injuries, absolute and dynamic strength training, aerobic/cardiovascular training, flexibility, and exercises specific to the fire service.
Prerequisites: Successful completion of Fire Cadet Fitness Evaluation.

4773 Volunteer Firefighter 2-2-3
A course on basic knowledge and skills required for Ohio volunteer firefighters. Topics include: Ohio Department of Public Safety objectives, tools and equipment, and safety policies and procedures.
Prerequisites: FST 4760, FST 4772 (minimum grade C for both).

4774 Firefighter Transition 4-4-5
A continuation of FST 4773. Topics include: Ohio Department of Public Safety objectives, tools and equipment, safety policies and procedures, and HAZMAT and live fire training evolutions.
Prerequisites: FST 4773 (minimum grade C).

4775 Firefighter Agility Skills 1-2-2
A course on preparing for competitive agility skills testing required for entry into fire service.
Prerequisites: FST 4772, FST 4783 (minimum grade C for both).

4779 Fire Service Engine/Pump Operation 2-2-3
A course on theory and operation of engines and pumpers used in firefighting, including equipment operation demonstration and practice.
Prerequisites: FST 4784 (minimum grade C).

4780 Firefighting Strategies and Tactics 3-0-3
A course on firefighting methods and best practices. Topics include: the incident command system, benchmarking, and outcomes. Students review large fire case studies.
Prerequisites: FST 4784 (minimum grade C).

4781 Building Construction for Fire Protection 4-0-4
An introduction to building construction as it relates to firefighting and life safety. Topics include: the elements of construction and design, building inspection factors, preplanning fire operations, and safe operations during emergencies.
Prerequisites: None.

4783 Firefighter 1 6-6-8
A course on NFPA 1001 Firefighter 1 objectives. Topics include: ladders, fire hose, fire department communications, ropes, nozzles, water supply, ventilation, forcible entry, and firefighter safety.
Prerequisites: FST 4760, FST 4765, FST 4772 (minimum grade C for all).

4784 Firefighter 2 6-6-8
The final course required by Ohio to become a firefighter. Topics include: specialized tools, equipment, and appliances; foam application; vehicle extrication; fire control and company operations. All objectives required by the Ohio Department of Public Safety and NFPA are covered.
Prerequisites: FST 4783 or FST 4774 and FST 4765 (minimum grade C for all).

4785 Legal Aspects of the Emergency Services 3-0-3
A course that explores legal issues regarding emergency services. Topics include: disciplinary hearings, collective bargaining agreements, background checks, and court decisions involving current issues such as do not resuscitate orders, duty to act, sexual harassment, and Americans with Disabilities Act.
Prerequisites: None.

4786 Fire Officer 1 4-0-4
A course that prepares students as company officer as defined by the NFPA 1021 Fire Officers Professional Qualifications Level One. Topics include: human resource management, community and government relations, inspections, investigations, emergency service delivery, and safety.
Prerequisites: FST 4743 (minimum grade C).

4789 Firefighter Internship 0-14-2
A course in which students are assigned to a designated fire department mentor and participate in activities such as house duties, equipment checks, classroom training, and drills.
Prerequisites: FST 4784 (minimum grade C).

4790 Firefighter Self Rescue 1-3-2
A course that uses classroom instruction, demonstrations and practice to teach firefighters how to help themselves when their lives are at risk on the fire ground.
Prerequisites: FST 4784 (minimum grade C).

4791 Fire Safety Inspector 7-0-7
A course in which students complete classroom and practical exercises in basic fire safety inspection procedures and responsibilities. This course meets requirements prescribed in House Bill 590 and NFPA 1031. Students must be members of a fire department.
Prerequisites: FST 4784 (minimum grade C).

4792 Fire Service Blueprint Reading 2-2-3
An introductory course that explores architectural and civil engineering symbols and abbreviations used on drawings. Topics include: various systems utilized in buildings including water, fire protection, mechanical devices, and electrical systems including power distribution through lighting systems.
Prerequisites: None.

4793 Evolution of the Fire Service 2-0-2
A course on the growth of the fire service from its creation through the 21st century. Topics include: changes in suppression methods, building codes, and rescue techniques; administrative philosophies; and personnel behaviors.
Prerequisites: None.

4794 Rapid Assistance/Self Rescue Operations 2-4-4
A course on firefighter self rescue and rapid assistant team operations. Topics include: solutions to line of duty deaths, and fire ground safety and survival.
Prerequisites: FST 4784 (minimum grade C).

4795 Crew Resource Management 3-0-3
The study of the effects of human error during fire ground operations, focusing on decreasing injuries and deaths during firefighting. Topics include: communication, task allocation, teamwork, critical decision making, and situational awareness.
Prerequisites: FST 4784 (minimum grade C).

4798 Special Studies - Fire Service Technology Var-Var-Var
Special projects pursued by certified firefighters seeking college credit in the Fire Service Technology degree program. Before registration, students must have the plan of study approved by the supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

4799 Special Studies-Fire Service Technology Var-Var-Var
Study of special projects pursued by certified firefighters seeking college credit in the Fire Service Technology degree program. Students must have the plan of study approved by the supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

FYE First Year Experience

9001 College Survival Skills 1-0-1
A course that introduces students to Cincinnati State, the College's resources, and its expectations for new students. Topics include: making a successful transition to college, study skills and time management, diversity, and how to read a college catalog. This course earns college credit, but it does not fulfill general studies or core course requirements for degree or certificate programs. This course must be completed in the first 18 hours at Cincinnati State.
Prerequisites: None.

9002 College Success Strategies 2-0-2
An expanded version of FYE 9001 that allows students more time to develop college success strategies and participate in community-building activities. Topics include: making a successful transition to college, study skills and time management, diversity, and how to read a college catalog. This course earns college credit, but does not fulfill general studies or core course requirements for degree or certificate programs. This course must be completed in the first 18 hours at Cincinnati State.
Prerequisites: None.

9003 The Community College Experience 3-0-3
An orientation course that helps students make a successful transition to college life with college success strategies and community-building activities. Topics include: study skills and time management, academic and financial planning, campus resources, diversity issues, interpersonal communication, health and wellness, and goal setting. This course earns college credit, but does not fulfill general studies or core course requirements for degree or certificate programs. This course must be completed in the first 18 hours at Cincinnati State.
Prerequisites: Advisor consent.

GC Graphic Communications

1403 Computer Graphics for Printing 1 2-3-3
An introduction to page layout using various software applications. Topics include: simple layouts, printer's measurement system, typographic concepts, color selection, and generating artwork using paint applications, scanners, and the Internet. Emphasizes production for the high-end press environment.
Prerequisites: None.

1410 Graphic Design Production 2-3-3
A course on preparing art for digital and industrial printing processes including lithography, flexography, gravure, and screen.
Prerequisites: IT 5443, IT 5444, and IT 5456 or GC 1423.

1415 Graphic Arts Processes 2-3-3
A course on evaluating printing processes including: lithography, flexography, screen, gravure, and letterpress. Lab projects involve basic training in prepress and presswork, and demonstrations of flexographic and screen printing procedures.
Prerequisites: None.

1419 Survey of Printing Inks 3-0-3
A course on the physical characteristics of ink and the manufacturing process for different types of ink used in the printing industry. Topics include: how ink components affect color, drying properties, substrates, and cost.
Prerequisites: None.

1421 Computer Graphics for Printing 2 2-3-3
A continuation of GC 1403. Topics include: advanced QuarkXPress, introduction to drawing and image editing applications, methods of scanning graphics and text, resolution of files and devices, and essential hardware for the prepress environment.
Prerequisites: GC 1403.

1423 Adobe InDesign 2-3-3
An introduction to using Adobe InDesign desktop publishing software to create basic print documents. Techniques include: master pages, importing text and graphics, color, swatches and gradients, formatting type, transparency, using tables and preparing for handoff for print production or creating PDF files.
Prerequisites: None.

1425 Film and Plates for Packaging 1-4-3
A course on the fundamentals of using a step and repeat camera. Topics include: the proper darkroom procedure necessary to produce film(s) used to make photopolymer printing plates, and basic operation of a flat bed, solvent-based photopolymer plate-making system.
Prerequisites: GC 1421.

1426 Packaging and Advertising Processes 3-0-3
A course on how packages are created for advertising. Topics include: developing and evaluating the many packaging options for advertising processes such as lithography, flexography, and gravure; corrugated and plastic packaging technology; and digital-on-demand presses for the packaging industry.
Prerequisites: None.

1429 Screen Printing 2-6-4
A course on using and operating manual and semiautomatic screen printing presses. Topics include: fundamentals of printing frames, mesh, emulsions, stencils, squeegees, and inks and printing on many substrates and odd-shaped objects.
Prerequisites: GC 1421.

1430 Label and Packaging Presswork 1 1-7-4
A course on operating four-color narrow web flexographic presses and handfed and automatic platen letterpresses. Topics include: using this equipment to print, perforate, score, diecut, number, emboss, and foil stamp; an introduction to flexographic cameras; platemaking; and operating a flexo press.
Prerequisites: GC 1421.

1431 Label and Packaging Presswork 2 3-9-6
A continuation of GC 1425 and GC 1430, emphasizing operating a four-color seven-inch Comco narrow web flexo press. Topics include: in-line diecutting, laminating, perforating and slitting pressure-sensitive substrates, and using water-soluble and UV inks.
Prerequisites: GC 1421, GC 1430, GC 1425.

1432 Specialty Graphic Imaging 2-6-4
A course on applying screen printing fundamentals to other applications. Topics include: pad printing, wide-format digital imaging, vehicle wraps, window decals, UV ink application, and embroidery.
Prerequisites: GC 1429.

1439 Introduction to Offset Presswork 1-4-3
A course on sheetfed offset printing. Topics include: comparison of wet and dry forms of lithography; plate comparisons including presensitized, bi-metal, and grainless synthetics; the adjustments necessary for quality printing; and using pressroom and plate equipment.
Prerequisites: None.

1440 Offset Presswork 3-9-6
A course on advanced sheetfed and webfed offset printing. Topics include: color consistency, controlling dot gain and slur, plugging halftones, maintaining the ink and dampening systems for high quality printing. Includes demonstration of Advanced Quality Control production devices that produce top notch printing quality.
Prerequisites: GC 1415 and GC 1439 or equivalent knowledge.

1449 Printing Estimating 1 2-3-3
A course on determining job cost with an emphasis on paper used in sheet-fed offset and flexographic printing. Students use formulas to calculate impositions and the most cost effective printing methods, including ink, spoilage, and quality.
Prerequisites: None.

1450 Printing Estimating 2 2-3-3
A continuation of GC 1449. Topics include: an in-depth determination of job cost including labor, materials, burden, profit, and mark-up; characteristics and types of paper; paper sizes; selection process; proper cuts from mill size sheets; and use of manufacturer's catalogs and price books.
Prerequisites: GC 1449.

1451 Print Media Workflow 2-3-3
A continuation of GC 1449. Topics include: computerized printing estimating, computer-assisted scheduling and management information systems, web-to-print, and bidirectional links to workflow and file processing in a color managed environment. Students learn new web-based job viewing and tracking benefits to improve workflows.
Prerequisites: GC 1449.

1480 Digital Photography & Imaging 1 1-4-3
A course on digital photography and how to capture quality images with a hand-held or studio digital camera. Topics include: proper lighting, detail, and color balance; and storing images for other processes. Students print images on a digital press.
Prerequisites: None.

1481 Computer Graphics for Printing 3 2-3-3
A continuation of GC 1421, emphasizing desktop publishing, illustration, and image editing software for high-end production processes. Topics include: file construction for various end uses, resolution of files and devices, trapping techniques, retouching, preflighting, and color separations.
Prerequisites: GC 1421.

GC Graphic Communications
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1483 Computer Graphics for Printing 4 2-3-3
A continuation of GC 1481. Topics include: advanced desktop publishing concepts; illustration and image editing software; color correction, separations, proofing, UCR, and GCR; advanced trapping concepts using TrapWise; Preps imposition software; and creating PDF files using Adobe Acrobat.
Prerequisites: GC 1481.

1484 Commercial Portfolio Production 1-0-1
A course on building a portfolio that represents students' work. Students learn to present samples of creative work to a prospective employer or client in different formats including traditional portfolios to digital presentation. Students must provide samples of their work.
Prerequisites: None.

1490 Digital Photography & Imaging 2 1-4-3
A continuation of GC 1480. Topics include: advanced lighting techniques, configuring camera for proper exposure and resolution, manipulating images with Adobe Photoshop, quality color, and reproducing images on digital printers or high resolution digital presses.
Prerequisites: GC 1480.

9223 Cooperative Education - Graphics 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to Graphics Communication program, 2.0 minimum GPA.

9243 Cooperative Education Graphics - Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to Graphics Communication program, 2.0 minimum GPA.

GEO Geography

1551 World Regional Geography 1 3-0-3
A study of the characteristics and differences of the major world regions. Topics include: the concepts used to study regional geography and the cultural, economic, political, historical, and physical characteristics of Anglo-America, Latin America, Western Europe, Eastern Europe including Russia and the Baltic States, and Australia/New Zealand.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1552 Cultural Geography 3-0-3
A survey of diverse human customs and world patterns of culture. Emphasizes differences in land, language, religions, and political systems. Topics include: ethnicity, population practices, territoriality, the seeking of security and nourishment, resource use, and commonalities among peoples.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1553 World Regional Geography 2 3-0-3
A continuation of GEO 1551. Topics include: the concepts used to study regional geography and the cultural, economic, political, historical, and physical features of Sub-Saharan Africa; the Middle East and North Africa; East Asia including Japan and South Asia, and Southeast Asia.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

HFT Health and Fitness Technology

4058 Advanced Life Saving 1-2-2
Instruction in life saving techniques that meet the American Red Cross life saving certificate requirements.
Prerequisites: Deep water swimming ability and 500 yard continuous swim.

4060 Water Safety Instructor Certification 1-2-2
Instruction in practice of approved techniques. Meets qualifications for American Red Cross certification.
Prerequisites: HFT 4058 (minimum grade C).

4098 Special Studies in Health and Fitness Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, students must have a plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

4120 Foundations of Aromatherapy 2-2-3
Topics include: aromahistory with a focus on ancient cultures, profiles of essential oils, production and quality of essential oils, basic physiology, physical and emotional effects, healing oils, and contraindications.
Prerequisites: None.

4121 Fundamentals of Pilates Mat 2-2-3
The first class of a three-term Pilates Mat certificate program that prepares students for the National Pilates Mat Certification Examination. Topics include: principles of Pilates, terminology, basic order of mat exercises, postural analysis and transitions, and modification for the flow of Pilates.
Prerequisites: None.

4122 Reiki: First and Second Degree 0-2-1
A course that exposes the student to Level 1 and Level 2 in Reiki. Topics include: history, concepts, hand positions, and the practice of Reiki as a healing tradition.
Prerequisites: None.

4123 Pilates Mat Instructor 2-2-3
A course that prepares students for the National Pilates Mat Certification Examination. Topics include: intermediate Pilates mat series, communication skills, educational principles, safety guidelines, and modifications for special populations.
Prerequisites: HFT 4121 (minimum grade C).

4124 Pilates Mat Practicum 1-5-2
Students apply Pilates knowledge and skills to a health and fitness setting. Topics include: observation and assisting in a class taught by certified Pilates instructors, designing Pilates routines, and teaching beginner and intermediate Pilates mat classes.
Prerequisites: HFT 4123 (minimum grade C).

4141 Fundamentals of Yoga 1-2-2
An introduction to the practice of Sadhana Yoga Chi, Astanga-Vinyasa and hard and soft form style variations. Topics include: basic postures (asanas), breathing techniques (pranayamas), meditation, relaxation, and yogic philosophy.
Prerequisites: None.
Corequisites: HFT 4142, HFT 4143.

4142 Yoga Teaching Methodology 1-2-2
Students learn principles of yoga class instruction through demonstration, observation, assisting, and correcting. Topics include: teaching styles, Soft Vinyasa and Power Vinyasa variations, qualities of a yoga instructor, and client learning styles.
Prerequisites: None.
Corequisites: HFT 4141, HFT 4143.

4143 Building a Personal Yoga Sequence 0-2-1
A laboratory experience in which students learn to develop and sustain a personal yoga sequence.
Prerequisites: None.
Corequisites: HFT 4141, HFT 4142.

4144 Yoga Techniques & Practices 1 1-4-3
Training in the practice of basic postures, breathing and cleansing techniques, chanting, meditation, and hands-on adjustments using Soft Vinyasa and Power Vinyasa sequences.
Prerequisites: HFT 4141, HFT 4142, HFT 4143 (minimum grade C).
Corequisites: HFT 4145, HFT 4148.

4145 Anatomy of Hatha Yoga 2-0-2
Students learn the physical anatomy and physiology of yoga postures (bodily systems, muscles used and physical benefits of yoga) and subtle anatomy and physiology such as chakras (energy centers) and nadis (energy channels).
Prerequisites: HFT 4141, HFT 4142, HFT 4143 (minimum grade C for all).
Corequisites: HFT 4144, HFT 4148.

4146 Yoga Techniques & Practices 2 1-4-3
Training in the practice of intermediate and advanced postures, breathing and cleansing techniques, chanting, meditation, and hands-on adjustments using Soft and Power Vinyasa sequences.
Prerequisites: HFT 4144 (minimum grade C).
Corequisites: HFT 4149.

4147 Philosophy & Ethics of Yoga 2-0-2
The study of yogic philosophy, yoga sutras, ethics for yoga instructors, and karma yoga. Topics include: philosophy from Patanjali as well as other styles and traditions of yoga.
Prerequisites: HFT 4146 (minimum grade C).
Corequisites: HFT 4150.

4148 Yogic Nutritional Lifestyle 2-0-2
The study of healthy living through the yogic tradition. Topics include yogic nutrition, raw food preparation, and recipes. Offsite field trips may be required for this course.
Prerequisites: HFT 4142, HFT 4143 (minimum grade C).
Corequisites: HFT 4144, HFT 4145.

4149 Yoga Practicum 1 1-5-2
Students apply knowledge and skills in a health and fitness setting. Includes observation, assisting with beginner classes, and teaching beginner classes and beginner Soft Vinyasa and Power Vinyasa sequences.
Prerequisites: HFT 4144 (minimum grade C).
Corequisites: HFT 4146.

4150 Yoga Practicum 2 1-5-2
Students transform knowledge and skills in yoga to a health and fitness setting. Includes observation and assisting in intermediate classes taught by certified yoga instructors, designing yoga sequences, and teaching beginner and intermediate yoga routines.
Prerequisites: HFT 4149 (minimum grade C).
Corequisites: HFT 4147.

4151 Herbology 2-0-2
An introduction to herbal preparations and their effects on the human body. Topics include: herbs, herbal preparation, and physiological effects.
Prerequisites: None.

4152 Journaling 2-0-2
A course that focuses on using journaling to empower students to process and reduce stress. Topics include: journaling definition and techniques, the stress response, physiological effects of stress, and the impact of journaling on stress.
Prerequisites: None.

4153 Foundations of Exercise Science 3-2-4
An introduction to the human body's response and adaptation to exercise and physical training. Topics include: testing and measurement related to exercise and fitness.
Prerequisites: DE 0024, DE 0011, and DE 0005 or appropriate placement test scores.

4154 Journaling 2 2-0-2
A continuation of HFT 4152. Students focus on techniques to assist them in identifying and clarifying personal objectives. Topics include: developing personal vision statements and successfully dealing with obstacles.
Prerequisites: HFT 4152.

4160 Fundamentals of Aerobics 2-2-3
A course that combines stretches, aerobics, step aerobics, and resistive exercises to promote cardiorespiratory endurance and enhance strength and flexibility. Topics include: exercise and its effects on the body.
Prerequisites: None.

4161 Health and Fitness Practicum 1-13-2
A practicum in a health and fitness setting. Students gain in-depth experience in transforming health and fitness knowledge and skills into a practice setting.
Prerequisites: HFT 4153, HFT 4163 (minimum grade C for both).

4162 Fundamentals of Water Aerobics 2-2-3
Introduction to aquatic exercise techniques and principles for those pursuing aquatic group instructor status. Classroom emphasis is on the effects of water on the body. Lab includes classes in the aquatic environment.
Prerequisites: None.

4163 Foundations of Health and Fitness 2-2-3
A course on developing fitness and wellness programs for individuals and groups, emphasizing health promotion and disease prevention.
Prerequisites: None.

4164 Developing Exercise Prescriptions 2-2-3
A course on developing and implementing exercise prescriptions for healthy adults and special populations. Topics include: developing programs for health related, fitness related, and performance related criteria emphasizing safe, effective, and efficient goal achievement.
Prerequisites: HFT 4169 (minimum grade C).

4165 Group Fitness Instructor 2-3-4
Prepares students for the National Group Fitness Instructor Examination. Topics include: communication skills, education principles, effective exercise design, choreography, safety guidelines, and modifications for special populations. Lab includes conducting classes in traditional and step aerobics.
Prerequisites: HFT 4160 (minimum grade C).

4166 Aquatic Group Fitness Instructor 2-2-3
A course that prepares students for the national Aquatic Instructor Examination. Topics include: communication skills, educational principles, effective exercise design, fundamentals of water properties, choreography, safety guidelines, and modifications for special populations. Lab includes classes in the aquatic environment.
Prerequisites: HFT 4162 (minimum grade C).

4167 Aquatic Personal Trainer 1-2-2
An intermediate course for the candidate with experience as a personal trainer or in the aquatic fitness industry. Emphasizes practical application skills needed for aquatic personal trainers.
Prerequisites: Personal Fitness Trainer Certificate or a nationally accredited PFT certification.

4168 Aquatic Leadership and Development 1-2-2
An advanced course on developing and reinforcing instructor skills and techniques essential to design, implement, and lead various aquatic group exercise programs.
Prerequisites: HFT 4162, HFT 4166, HFT 4167, EMS 4730 (minimum grade C for all).

4169 Fitness Assessment 2-2-3
A course on health-related fitness assessment tools and skills. Topics include: choosing assessment protocols and administering fitness assessments to healthy adults and to special populations. Students practice assessment skills through lab and outside experiences.
Prerequisites: HFT 4153, HFT 4163 (minimum grade C for both).

4170 Personal Fitness Trainer 1 3-2-4
An introduction to techniques used in the fitness field. Topics include: screening and consultation guidelines, dietary and exercise principles, communication, and documentation. Lab includes: skin fold testing, blood pressure, flexibility and resistance testing, and training.
Prerequisites: HFT 4153 (minimum grade C), informed consent, health form, medical clearance (if applicable).

4171 Personal Fitness Trainer 2 3-2-4
Provides CSC Certificate and prepares student for the National Health/Fitness Instructor Certification Exam. Topics include: application of dietary and exercise principles, therapeutic exercise, special populations, legal issues, and analysis and evaluation of common fitness techniques and norms.
Prerequisites: HFT 4170 (minimum grade C).

4172 Special Fitness Training: Larger Adults 1-0-1
A course in which students learn to address the psychological and physiological needs of larger adults in group or individual fitness training. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: None.

4173 Special Fitness Training: Older Adults 1-0-1
A course in which students learn to address the psychological and physiological needs of senior citizens in group or individual fitness training. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: None.

4174 Special Fitness Training: Children 1-0-1
A course in which students learn to address the psychological and physiological needs of children in group or individual fitness training on land and in water. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: None.

HFT Health and Fitness Technology
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4175 Special Fitness Training: Musculoskeletal/Neurologic Disorders 1-0-1
A course in which students learn to work with individuals with arthritis, fibromyalgia, multiple sclerosis, Parkinson disease, ALS, low back pain, hip/knee replacements, spinal cord injuries, and cancer. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: None.

4176 Special Fitness Training: Nutrition and Exercise 1-0-1
An advanced course on nutrition through the lifespan emphasizing nutritional supplements, the effects of fad diets, and athletic performance. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: None.

4177 Special Fitness Training: Perinatal 1-0-1
A course in which students learn to work with perinatal and postpartum clients using the American College of Obstetricians and Gynecologists (ACOG) guidelines. Students may apply credit to CECs for general certification or a specialty national agency certification.
Prerequisites: None.

4178 Special Fitness Training: Common Chronic Diseases 1-0-1
A course in which students apply knowledge, skills, and techniques for teaching fitness and wellness to clients with chronic illnesses such as cardiovascular, pulmonary, and metabolic diseases. Credit may be applied to CECs for general certification or a specialty national agency certification.
Prerequisites: None.

4179 Personal Fitness Trainer Practicum 1-13-2
Students apply personal fitness training knowledge and skills in a health and fitness setting.
Prerequisites: HFT 4170.

4180 Leading and Developing Exercise Programs 2-2-3
Topics include: exploration of leadership concepts and styles as they relate to the development and implementation of exercise programs for individuals and groups.
Prerequisites: None.

4181 Fitness Assessment and Exercise Prescription 2-2-3
Methods of assessing health status, cardiorespiratory and muscular fitness, and flexibility and body composition in healthy individuals; and development and evaluation of exercise prescriptions.
Prerequisites: None.

4182 Community Health Assessment 2-2-3
A course on techniques for screening, appraising, and developing health history and activity patterns for the community. Students complete a community health and fitness needs assessment project.
Prerequisites: HFT 4153, HFT 4163 (minimum grade C for both).

4183 Health and Fitness Internship 1-16-3
Students use health and fitness knowledge and skills with clients in a community setting. Students develop a portfolio of individual competencies.
Prerequisites: HFT 4153, HFT 4163 (minimum grade C for both).

4185 Fundamentals of Resistance Training 2-2-3
Safe, effective, and efficient resistance training programming techniques. Topics include: evaluation of biomechanical, physiologic, and genetic factors affecting strength and muscle tissue gain.
Prerequisites: None.

4186 Resistance Training Development and Implementation 2-2-3
Topics include: advanced application of proper resistance training form, technique, spotting, program design, and implementation for healthy adults and special populations.
Prerequisites: HFT 4185 (minimum grade C).

4199 Special Studies in Health and Fitness Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and the faculty member, carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the HFT program chair. Students receive grades of S or U for this course.
Prerequisites: Instructor consent.

4817 Integrative Therapies for Holistic Health 3-2-4
A course on current holistic health care practices. Topics include: comparison of the philosophies and practices of Eastern to Western medicine with emphasis on the practice of Chinese, Ayurvedic, and naturopathic medicine; and practice of basic skills such as therapeutic massage, acupressure, and other therapies common to integrative medical practices.
Prerequisites: None.

4818 Survey of Alternative and Complementary Medicine 3-0-3
An introduction to alternative and complementary medicine. Topics include: alternative medical practices such as mind-body interventions, bioelectromagnetic applications in medicine, community-based health care practices, manual healing methods, pharmacologic and biologic treatments, diet, and nutrition in the prevention and treatment of disease.
Prerequisites: None.

9368 Cooperative Education - Health and Fitness Technology 1-40-2
Health and Fitness Technology students apply knowledge and skills acquired in classes in a full-time paid learning experience. Students must adhere to the Health and Public Safety Division Student Handbook and program requirements.
Prerequisites: Admitted to the Health and Fitness Technology program, coordinator consent, 2.0 minimum GPA.

9378 Parallel Cooperative Education - Health and Fitness Technology 1-20-1
Health and Fitness Technology students apply knowledge and skills acquired in classes in a part-time paid learning experience. Students must adhere to the Health and Public Safety Division Student Handbook and program requirements.
Prerequisites: Admitted to HFT program, coordinator consent, 2.0 minimum GPA.

HIM Health Information Management

1000 Medical Office ICD-9-CM Coding 2-2-3
An in-depth study of diagnostic coding for the medical office. Topics include: ICD-9-CM codes used on superbills and other encounter forms. This course does not meet degree requirements for HIM or Coding Certificate majors.
Prerequisites: MCH 4807 or MCH 4815.

1001 Medical Office Basic CPT Coding 2-2-3
An introduction to coding using Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS). Topics include: CPT and HCPCS rules for Medicare billing in ambulatory settings. This course is does not meet requirements for HIM degree majors or Coding Certificate majors.
Prerequisites: HIM 4407, and MCH 4807 or MCH 4815, (minimum grade C).

4400 Introduction to Health Information Management 3-2-4
An orientation to the Health Information Management profession and health care data. Topics include: history of the profession, professional associations, ethics, data collection, access, storage, retention, and organization of the HIM function.
Prerequisites: None.

4401 Health Care Information Technology Systems 2-2-3
An introduction to hardware and software systems commonly used in health care. Topics include: hardware, software, proprietary applications used in Health Information Management, and clinical inpatient information systems.
Prerequisites: MCH 4002, HIM 4400, HIM 4407, HIM 4415 (minimum grade C).

4407 Health Record Content and Format 2-2-3
An overview of the health record. Topics include: the content of the health record and documentation requirements.
Prerequisites: MCH 4806, HIM 4400, MCH 4002 (minimum grade C).

4410 Basic CPT Coding 3-2-4
An introduction to current procedural terminology and HCPCS coding.
Prerequisites: MCH 4807, BIO 4074, HIM 4407, HIM 4411 (minimum grade C for all).

4411 Clinical Abstracting 2-4-4
A course on abstracting supportive data to validate diagnoses and procedures and using the information to create clinical databases. Topics include: analyzing and interpreting clinical documentation and UHDDS guidelines.
Prerequisites: MCH 4807, HIM 4407, BIO 4073 (minimum grade C for all).

4415 Legal Aspects of Health Information 3-0-3
A study of the medical record as a legal document. Topics include: confidentiality, access to information, legal terminology, and retention.
Prerequisites: HIM 4400, MCH 4002 (minimum grade C for both).

4417 Health Data Analysis and Presentation 3-2-4
A course on common statistical formulas, spreadsheet applications, and data presentation. Students must have a calculator.
Prerequisites: HIM 4420, MCH 4002 (minimum grade C for both).

4419 Health Information Management Technology Systems Skills Lab 0-3-1
A clinical lab course in which students apply health information management knowledge and skills in an electronic environment. Students demonstrate competency using a variety of health information technology applications.
Prerequisites: HIM 4401, HIM 4417 (minimum grade C for both).

4420 Basic ICD-9-CM Coding 2-2-3
A course on basic principles for coding ICD-9-CM classification system.
Prerequisites: MCH 4807, BIO 4074 (minimum grade C for both).

4421 Intermediate ICD-9-CM Coding 3-2-4
A continuation of HIM 4420. Topics include: cardiovascular system, neoplasms, pregnancy, injuries, and poisonings.
Prerequisites: HIM 4420 (minimum grade C).

4422 Clinical Classification Systems 2-2-3
A course on principles and applications of coding systems, case mix analysis, severity of illness, and data quality.
Prerequisites: HIM 4421, HIM 4417 (minimum grade C for both).

4428 Professional Practice 1 1-4-2
Student practice in a medical records department. Activities include: admission/discharge procedures, correspondence and medical information release, analysis of documentation, record control, and projects in health information.
Prerequisites: HIM 4405, HIM 4407, HIM 4415 (minimum grade C).

4429 Professional Practice 2 1-4-2
A course that includes special interest assignments and exposure to alternative specialties in the health information field.
Prerequisites: HIM 4422, HIM 4428, HIM 4431, HIM 4432, HIM 4452, HIM 4453 (minimum grade C for all).

4431 Health Information Department Management 4-0-4
A course on the management functions of a health information department. Topics include: organizational structure, line and staff relationships, position descriptions, job procedures, personnel evaluations, budgeting, and specific issues in health information management.
Prerequisites: HIM 4400, HIM 4407, HIM 4428 (minimum grade C).

4432 Alternative Health Record Systems 3-0-3
A course on health record content and format in specialized patient care settings. Topics include: regulatory and accreditation requirements, storage and retention needs, classification systems, data collection/reporting, and quality issues.
Prerequisites: HIM 4407, HIM 4415, HIM 4420 (minimum grade C for all).

4449 Medical Billing Procedures 2-4-4
A course on methods for completing and processing health care claims. Topics include: applying coding guidelines and practical experience in completing a variety of health care claims.
Prerequisites: HIM 4421, HIM 4410 (minimum grade C for both).

4450 Reimbursement Methodologies 2-2-3
A course on various methods of reimbursement for health care services. Topics include: an overview of auditing procedures necessary for compliance and accurate reimbursement.
Prerequisites: HIM 4449 (minimum grade C).

4451 Intermediate CPT Coding 3-2-4
A course on guidelines for accurate CPT coding assignment of surgical cases. Students abstract information from actual operative reports and case studies.
Prerequisites: HIM 4410 (minimum grade C).

4452 Coding Skills Clinical Lab 0-3-1
A clinical lab course in which students practice and demonstrate competency in ICD-9-CM and CPT coding skills.
Prerequisites: HIM 4421, HIM 4451 (minimum grade C for both).

4453 Quality Assessment in Health Information Management 3-0-3
A course on performance improvement initiatives in health care. Topics include: implementing quality tools as they relate to HIM activities and concepts, and theories of utilization management and risk management.
Prerequisites: HIM 4417, HIM 4420 (minimum grade C for both).

4491 Health Information Management Seminar 3-0-3
A review of theory and practice in health information management in preparation for national examinations.
Prerequisites: HIM 4431, HIM 4432, HIM 4453, HIM 4422, HIM 4451, HIM 4452 (minimum grade C for all).

4492 Health Information Management Current Topics 1-0-1
Study of selected current issues and topics in the Health Information Management field.
Prerequisites: HIM 4431, HIM 4453, HIM 4422, HIM 4451, HIM 4452 (minimum grade C for all).

4499 Special Studies - Health Information Management Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: HIM 4400 (minimum grade C).

9373 Cooperative Parallel Education - HIM 1-20-1
Health Information Management students participate in part-time paid learning experience while completing other program requirements. This experience provides an opportunity to apply knowledge and skills acquired in classes. Students must adhere to the Health and Public Safety Division Student Handbook and program requirements.
Prerequisites: Admitted to HIM program, coordinator consent, 2.0 minimum GPA.

HLT Health Technologies

4094 Workshops in Health Technologies 3-0-3
A study of selected issues and topics in the health technologies area that meets current needs. Content and emphasis vary from year to year.
Prerequisites: None.

HNR Honors Experience

1695 Orientation to Honors 2-0-2
A course required for students admitted to the Cincinnati State Honors Experience. This course is the prerequisite for all other Honors classes, and also fulfills the College FYE requirement. Topics include: expectations, responsibilities, and opportunities of the Honors Experience; personal and academic skills and strategies for Honors courses; and other College orientation information.
Prerequisites: Admitted to Honors Experience or Instructor Consent.

1696 Honors Colloquium Var-Var-Var
Study and discussion of selected interdisciplinary topics in a seminar format, emphasizing student inquiry, critical thinking, and critical analysis of material. Students complete papers, projects, and/or presentations. Topics vary from term to term.
Prerequisites: HNR 1695, ENG 1001.

HOSP Hotel-Restaurant Management

9224 Cooperative Education-Hospitality Technologies 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the Hospitality program, 2.0 minimum GPA.

9244 Cooperative Education Hospitality - Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the Hospitality program, 2.0 minimum GPA.

HRM Hospitality Management

3630 Survey of Hospitality Careers 2-0-2
A survey of the history, trends, and organizational structure of the hospitality industry. Guest speakers and trade publications provide information on career opportunities. Students complete a career exploration project.
Prerequisites: None.

HRM Hospitality Management
HST History

3631 Food Service Sanitation 2-0-2
A study of sanitation and safety in the food service industry. Topics include: information and methods to help food service managers apply sanitation procedures to proper handling functions. This is the National Restaurant Association's Educational Institute certification course.
Prerequisites: DE 0011 or appropriate placement test score.

3632 Food & Beverage Cost Control 1 3-0-3
An introduction to food service cost systems emphasizing purchasing and production. Topics include: buying, receiving, inventories, portioning, and computing costs.
Prerequisites: DE 0024 or appropriate placement test score.

3633 Food & Beverage Cost Control 2 3-0-3
A continuation of HRM 3632. Topics include: food service cost control systems emphasizing sales control, profit and loss, and labor control. Students use relevant software applications.
Prerequisites: HRM 3632.

3634 Dining Room Service 1 0-6-2
A course on fundamental dining room service. Student are introduced to table settings, customer interaction, table service, and the point of sale system as they serve breakfast and lunch in the dining room.
Prerequisites: CUL 3601.

3635 Food & Beverage Supervision 3-0-3
A course on human resource management in food service. Topics include: the problems of human resources and the elements of leadership and supervision.
Prerequisites: None.

3636 Hospitality Sales & Marketing 3-0-3
A course on marketing and sales techniques in the hospitality industry and purposes and goals of internal and external marketing strategies. Topics include: marketing plans, menu design, personal sales, advertising, and market segmentation.
Prerequisites: None.

3638 Beverage Management and Mixology 0-6-2
A course on beverage operations. Topics include: production of beer, wine, and distilled spirits; mixology; beverage controls; and operation of the dining room bar.
Prerequisites: HRM 3634.

3640 Dining Room Service 2 0-6-2
A continuation of HRM 3634. Topics include: beverage service, sales techniques, advanced POS functions, and French table service. Student serve evening meals in the dining room.
Prerequisites: HRM 3634.

3641 Restaurant Operations 2-4-4
A course on applying marketing, financial, and human resource concepts used in restaurant operations. This is the capstone course for restaurant management students and should be taken near the completion of the curriculum coursework.
Prerequisites: HRM 3638, HRM 3640.

3642 Introduction to Event Management 2-0-2
An overview of the event management field. Topics include: professional organizations, resources, and career possibilities.
Prerequisites: Instructor consent.

3643 On-Site Event Management 4-0-4
A course on techniques for improving the effectiveness of events. Topics include: site inspection, venue choice, goal setting, profitable planning, and other event manager responsibilities such as working with planning committees and managing volunteers.
Prerequisites: Instructor consent.

3644 Sales, Catering and Menu Production 3-0-3
A course on catering operation, sales process, and principles of menu development. Topics include: menu planning, construction, constraints, analysis and pricing, and negotiating sales and catering contracts.
Prerequisites: HRM 3643, instructor consent.

3652 Hotel Front Office Procedure 4-0-4
Study of front office management and operation with emphasis on using various types of front office equipment, supplies, and procedures. Topics include: practical operating procedures in performing the hotel night audit including registration, rates, and posting charges and credits.
Prerequisites: None.

3653 Hospitality Housekeeping 3-0-3
A course on housekeeping and its administration. Topics include: control of supplies, sanitation, cleaning techniques, decoration, equipment, and related subjects.
Prerequisites: None.

3660 Sommelier Preparation 3-2-4
A course that prepares students for the introductory certification exams of the Court of Master Sommeliers, International Sommelier Guild, and Society of Wine Educators. Topics include: history, production, and manufacturing of wine, beer, and spirits from all parts of the world and methods for tasting and analyzing beverages.
Prerequisites: None.

3661 Old World Wines 3-2-4
A course on European wines, covering France, Germany, Portugal, Spain, Italy, Austria, and Hungary. Topics include: history, geography, climate, grape varieties, and viticulture practices of each region.
Prerequisites: None.

3662 New World Wines 3-2-4
A course on non-European wines, covering Argentina, Australia, Canada, Chile, Mexico, New Zealand, South Africa, and the United States. Topics include: history, geography, climate, grape varieties, and viticulture practices of each region and characteristics of new world red and white wines.
Prerequisites: None.

HST History

1561 World Civilization before 1000 3-0-3
An introduction to the major trends in the development of Western and Asiatic civilizations from ancient Eurasian times to the fall of Byzantium.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

1562 World Civilization, 1000 to 1815 3-0-3
An introduction to the major trends in Western and Asiatic civilizations from the fall of Byzantium to the Congress of Vienna. Includes the native civilizations of the Americas.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

1563 World Civilization after 1815 3-0-3
An introduction to the major trends in Western and Asiatic civilizations from the Congress of Vienna to contemporary times.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

1568 American History to 1860 3-0-3
General historical survey of the formative years of the Republic from Colonial America through the outbreak of the American Civil War.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

1569 American History, 1860-1914 3-0-3
General historical survey of the United States from the Civil War through the end of World War I.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

1570 American History after 1914 3-0-3
General historical survey of the United States from the Roaring Twenties to contemporary times.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

1575 History of Africa 3-0-3
A general survey of African history with emphasis on the Diaspora, and the political, social, and cultural factors creating modern Africa.
Prerequisites: DE 0005, DE 0011 or appropriate placement test score.

1576 African-American History to 1860 3-0-3
African-American history from 1619 to the Civil War of 1860. Topics include: the different experiences of Blacks in the New World and the various factors that have shaped African-American communities in America.
Prerequisites: DE 0005, DE 0011 or appropriate placement reading and writing scores.

1577 African-American History, 1860-1929 3-0-3
A history of African-Americans from 1860 to the Depression era. Topics include: the role of African-Americans in the Civil War, their post-war experiences, the intensification of segregation, and their involvement in WWI and the post-war era.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

1578 African-American History after 1929 3-0-3
A history of African-Americans from the Depression to the present. Topics include: African-Americans in WWII, involvement in African resistance movements, rise of civil rights movements, and important African-American personalities.
Prerequisites: DE 0005, DE 0011 or appropriate placement test reading and writing scores.

HUM Arts & Humanities

1698 Topics in Humanities Var-Var-Var
Study and discussion of selected topics in the humanities, which may be drawn from one field within the humanities (e.g., urban history, criminology, social welfare in society, film studies) or may be interdisciplinary (e.g., popular culture studies, women's studies). Content and emphasis may vary from term to term.
Prerequisites: ENG 1001.

1699 Special Problems in Humanities Var-Var-Var
Individual study and special projects pertaining to one or more areas of the humanities. Open to students wishing to conduct independent study and/or research. Enrollment requires prior consent of the supervising instructor and the Dean of Humanities and Sciences.
Prerequisites: Six credits of English composition.

9801 Career Exploration Seminar 3-0-3
Students seeking an Associate of Arts or Associate of Science degree assess their life experience, skills, and interests, and carry out a variety of structured activities (including directed reading and writing assignments) in order to set realistic career goals. Students should complete this course during their second or third academic term.
Prerequisites: ENG 1001.

9802 Internship - Humanities & Sciences 1-20-2
Students seeking an Associate of Arts or Associate of Science degree participate in a part-time (15 to 32 hours per week for one academic term) unpaid field learning experience related to their career goals. Students must adhere to degree program internship policies and procedures to earn credit. The course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9803 Cooperative Education Humanities & Sciences 1-40-2
Students seeking an Associate of Arts or Associate of Science degree participate in a full-time (32 to 40 hours per week for one academic term) paid field learning experience related to their career goals. Students must adhere to the degree program cooperative education policies and procedures to earn credit. The course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9804 Parallel Cooperative Education Humanities & Sciences 1-20-1
Students seeking an Associate of Arts or Associate of Science degree participate in a part-time (15 to 32 hours per week for one academic term) paid field learning experience related to their career goals. Students must adhere to the degree program cooperative education policies and procedures to earn credit. This course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9805 Career Education Project Humanities & Sciences 1-40-2
Students seeking an Associate of Arts or Associate of Science degree complete individual study or a special project related to their major field and pertaining to their career goals. Working with an assigned faculty mentor, students define the project goals, carry out project tasks, and evaluate the results. This course may be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9806 Career Education Project 2 Arts & Sciences 2-40-4
Students seeking an Associate of Arts or Associate of Science degree complete individual study or a special project related to their major field and pertaining to their career goals. Working with an assigned faculty mentor, students define the project goals, carry out project tasks, and evaluate the results. This course may not be repeated for additional credit.
Prerequisites: Admitted to an AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

9807 Internship - Humanities and Sciences 1-40-4
Students seeking an Associate of Arts or Associate of Science degree participate in a full-time (32 to 40 hours per week for one academic term) unpaid field learning experience related to their career goals. Students must adhere to degree program internship policies and procedures to earn credit. The course may be repeated for additional credit.
Prerequisites: Admitted to AA or AS program, HUM 9801, coordinator consent, 2.0 minimum GPA.

HYD Industrial Maintenance

1011 Basic Industrial Hydraulics 1 3-1-3
A course on the fundamentals and principles of industrial hydraulics emphasizing hands-on exercises. Topics include: fluid conductors, seals, basic hydraulic symbols, construction, operation, and specific use of hydraulic pumps.
Prerequisites: None.

IDT Industrial Design Technology

7801 Introduction to Industrial Design 2-3-3
An overview of technical skills used in industrial design. Topics include: introduction to operating systems, file and data management, text and database documents, and electronic portfolios. Students use mechanical, graphic, and industrial design software.
Prerequisites: None.

7805 Rapid Visualization Techniques 0-4-2
A course on concept sketching. Topics include: hand sketching using scaled perspective to generate, communicate, and present ideas graphically.
Prerequisites: None.

7825 Human Factors in Design 2-3-3
A course on the study of elements relevant to human form and function. Topics include: using these principles as the foundation for designing safe and functional products.
Prerequisites: MET 7008 or MET 7108.

7850 Computer Modeling 1 2-3-3
An introduction to creating accurate 3-D surface and solid models. Students develop 3-D computer models for graphic visualization using advanced surfacing software.
Prerequisites: MET 7110 or MET 7108.

7855 Computer Modeling 2 2-3-3
A continuation of MET 7850. Topics include: creating, editing, and manipulating 3-D surface models.
Prerequisites: IDT 7850.

7870 Model Making/Prototyping 2-3-3
A course on the skills and techniques of fabricating models and prototypes. Students create actual physical models to demonstrate their designs.
Prerequisites: IDT 7855.

7880 Advanced Model Making/Prototyping 2-3-3
A continuation of IDT 7870. Students further develop the skills and techniques of fabricating models and prototyping required in the industrial design industry.
Prerequisites: IDT 7870.

7890 Industrial Design Project 2-3-3
A capstone course in which students complete an individual design of a product from concept to prototype.
Prerequisites: IDT 7880.

INM Industrial Maintenance

1401 Installation of Photovoltaic Systems 4-0-4
A course on solar photovoltaic systems for individuals seeking to become installers of solar PV systems. Topics include: PV system fundamentals, design and safe installation techniques of solar-electric systems. This course qualifies students for the NABCEP PV Entry Level Certificate of Knowledge exam.
Prerequisites: None.

IT Information Technologies

5102 Introduction to Macintosh 2-2-3
An introduction to operating the Apple Macintosh computer. Topics include: Microsoft Word word processing software and Claris Draw graphics software. Competency in typing or keyboarding is recommended.
Prerequisites: None.

5120 LAN Administration: Novell 3-2-4
A course in user administration for Novell local area network technology. Topics include: adding and controlling users, making network resources available to users, diagnosing and troubleshooting common problems, making Windows available, and setting up user scripts and menus.
Prerequisites: IT 5231, IT 5211.

5121 LAN Administration: Windows 1 3-2-4
A course on user administration for Microsoft Windows Server technology. Topics include: adding and deleting users, changing user privileges, and installing client software. Lab exercises expand understanding of key concepts.
Prerequisites: IT 5201; and IT 5231 or IT 5151.

5122 LAN Administration: Windows 2 3-2-4
A continuation of IT 5121. Topics include: directory services, active directory, performance monitoring, and deploying and managing software.
Prerequisites: IT 5121.

5125 LAN Administration: Messaging 3-2-4
A course on messaging via a network system. Topics include: e-mail, voice mail, integrating e-mail to voice mail, voice over IP, and instant messaging.
Prerequisites: IT 5121.

5128 Networking Design Project 3-2-4
A capstone course for students in the networking programs. Topics include: analyzing and designing proper network architecture and network installation. Students work in teams to develop network solutions for various business applications.
Prerequisites: IT 5122 or IT 5153.

5129 Computer Network Systems Design Project 3-2-4
A capstone course for students in the CNET program. Students work in teams to design and build network solutions.
Prerequisites: EET 7748, EET 7730, IT 5122, IT 5153.

5130 Telecommunications Management 3-2-4
A course on business telephone systems, equipment, services, and management. Topics include: PBX, Digital IBX, ISDN, SDN, DDS, ACD T-1, WATS, Megacomm, tariffs, wire distribution systems, documentation, and integration between computers and phone systems.
Prerequisites: None.

5131 Network Management/Help Desk 3-2-4
A course on help desk operations. Topics include: procedures, network management systems/software, troubleshooting with a network management system, server management, and configuring for fault tolerance.
Prerequisites: IT 5201.

5151 Network Communications 1 2-3-3
A course on computer networks and network operating systems. Topics include: network topology, local and wide area networks, connecting devices to networks, basic network software and file sharing, and problem solving. This course helps students prepare for the NET+ exam.
Prerequisites: IT 5201 or EET 7716.

5152 Network Communications 2 2-3-3
A continuation of IT 5151. Topics include: bridges; Ethernet switches; routers; gateways; network software; routed networks; router and bridge protocols; and VLANS, DNS, and DHCP services for client systems. Students demonstrate the operation of expandable networks and operating systems.
Prerequisites: IT 5151.

5153 Network Communications 3 2-3-3
A continuation of IT 5152. Topics include: access points, wireless bridges, relay concepts, access point power coverage areas, data transmission speeds, SSID, WEP, and data encryption. Students build and test wireless networks and incorporate design changes for networking models.
Prerequisites: IT 5152.

5154 Network Security and Legal Issues 1 3-2-4
A course on security and legal issues surrounding the use of computers. Topics include: security implementation, software protection, physical security, policy development, legal and ethical issues relevant to computer crime, software usage, and ethical responsibilities of business professionals.
Prerequisites: IT 5121.

5155 Network Security and Legal Issues 2 3-2-4
A continuation of IT 5154. Topics include: authentication, remote access, Web security, computer forensics, Internet crime, employer/employee issues, and rights of software developers.
Prerequisites: IT 5154.

5158 Network Security Design 2-2-3
A course on network design emphasizing security. Topics include: the design and testing of various layered network security software and hardware to protect business systems.
Prerequisites: IT 5122, IT 5153.

5191 Cisco CCNA Exam Preparation 2-2-3
A course that prepares students to take the Cisco CCNA certification exam. Topics include: routers, switches, hubs, network security devices, and network software.
Prerequisites: IT 5152.

5199 Special Studies - Information Technologies Var-Var-Var
Individual and independent study and special projects pertaining to the particular technology in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Students must make special arrangements with the instructor and program chair.
Prerequisites: None.

5201 Information Technology Concepts 2-3-3
An overview of information technologies. Topics include: networks, database management and access software, systems analysis and design, programming languages, and numbering systems. This course is only offered via the Internet. Students must understand basic computer terminology and be proficient with Microsoft Office applications and the Internet.
Prerequisites: None.

5202 Programming Logic and Methods 2-3-3
An introductory course in programming logic, methods, and documentation, emphasizing the structured approach to programming. Lab exercises focus on typical business applications.
Prerequisites: IT 5201.

5204 Program Design 1 2-3-3
An introduction to the basic elements of program design. Topics include: the sequence and iteration process, decision trees, decision tables, algorithms, flow charts, and basic program functions of business applications.
Prerequisites: None.

5205 Program Design 2 2-3-3
A continuation of IT 5204. Topics include: reading flowcharts, creating pseudocode for fundamental programming concepts for business applications, data flow diagrams, and database concepts.
Prerequisites: IT 5204.

5206 Programming Logic and BASIC 4-6-6
An introductory course in programming logic, methods, and documentation emphasizing the structured approach to programming. Students use typical business applications as problems, incorporating BASIC programming using structured programming techniques. Keyboarding ability necessary.
Prerequisites: None.
Corequisites: IT 5201, MAT 1124.

5207 Systems Analysis and Design 1 2-3-3
An introductory course that presents business/system analysis skills and techniques within the framework of the systems development life cycle. Topics include: business case analysis, requirements modeling, enterprise modeling, and development strategies.
Prerequisites: IT 5201.

5208 PC Software Support 3-2-4
An introductory course in PC software support processes. Topics include: using utility programs to back up and recover from hardware and software disasters, installing new software and updating existing programs, optimizing computer performance using software tools, and modifying/optimizing the Windows environment.
Prerequisites: IT 5232.

5211 Data Communications 1 2-3-3
An introductory course in business data communications. Topics include: basic terminology and concepts, operation and design of data communications systems, and a logical approach to recognizing communication problems.
Prerequisites: IT 5201.

5212 Data Communications 2 3-2-4
A continuation of IT 5211. Topics include: wide-area communications systems, communications test equipment, software testing programs, the model for Open Systems Interconnection of the International Standards Organization (ISO), protocol analysis, transmission cables and connectors and software diagnosis of communications problems.
Prerequisites: IT 5211.
Corequisites: EET 7702.

5216 Applied Programming Concepts 1 2-3-3
A course on fundamentals of programming logic and methods. Topics include: structured design; algorithm development; interactive planning and design; coding and debugging; variable data types; arrays; OOP methods, properties, encapsulation and inheritance; object-oriented programming with Ruby; data validation; and simulators.
Prerequisites: None.

5217 Applied Programming Concepts 2 2-3-3
A continuation of IT 5217. Topics include: using sub-procedures, arrays, data conversions, and string manipulations to solve complex data manipulation problems; using data types, passing values, and defining functions; programming in a graphical user interface environment; and object-oriented constructs.
Prerequisites: IT 5216 or IT 5291.

5220 Videography, Gripping, and Lighting Techniques 2-3-3
An introductory course on videography skills. Topics include: industry terminology, digital video camera techniques, shot composition, and use of lighting and support equipment for video and film projects.
Prerequisites: IT 5410, IT 5420 (minimum grade C for both).

5221 Video Production and Editing Basics 2-3-3
An introductory course on video production and editing process from concept to completion using Final Cut Pro and Avid XpressDV. Topics include: production planning, documentation, basic scripting and storyboarding, and basic digital video editing techniques.
Prerequisites: IT 5220.

5224 Video Production/Editing: Avid 3-4-5
A course on professional techniques for video production and editing using Avid Xpress DV. Topics include: visual storytelling and advanced digital editing techniques with attention to transitions, effects, and output.
Prerequisites: IT 5221, TC 5035 (minimum grade C for both).

5225 Video Post-Production: After Effects 3-4-5
A course on professional techniques using Adobe Premiere and Avid Xpress DV for video post-production and Adobe After Effects for compositing. Topics include: advanced video editing techniques including compositing, lighting, framing, and motion control.
Prerequisites: IT 5221 or IT 5546, IT 5443.

5226 Video Special Effects 3-4-5
A course on specialized video production techniques and projects using Adobe After Effects.
Prerequisites: IT 5225 (minimum grade C).

5227 Video Production/Editing: Final Cut Pro 3-4-5
A course on professional techniques for video production and editing using Apple Final Cut Pro. Topics include: advanced video post-production techniques, and producing video presentations for multiple computer platforms and a variety of distribution media.
Prerequisites: IT 5221, TC 5035 (minimum grade C for both).

5228 Audio/Video Capstone Project 4-6-6
Working in teams, students develop audio and video products for an external client. Activities include: audience, client, and market analysis; product design, planning, production, and testing; and project management. Students present project results to reviewers. Students who do not complete the course successfully may make one additional attempt.
Prerequisites: Completion of all other Audio/Video Production degree requirements with minimum grade C for all.

5229 Audio/Video/Film Seminar 2-0-2
A course in which students meet with local and/or national professionals in the fields of audio, video, and/or film production for discussion of professional issues and concerns.
Prerequisites: Program chair consent.

5230 Introduction to IBM System i 2-3-3
An introductory course on computer operations using IBM system i servers, emphasizing menus and functions.
Prerequisites: None.

5231 Operating Systems: Windows 1 2-3-3
An introduction to Windows operating system used on PCs. Topics include: basic commands and options; creating, naming, and manipulating files; sub-directories; batch files; start-up files; and Windows utilization and management. Lab work reinforces concepts.
Prerequisites: None.

5232 Operating Systems: Windows 2 2-3-3
A continuation of IT 5231. Topics include: utilities, drivers, memory management, and functions; constructing macros and batch files with conditions and iterations; backing up and recovering from directory and file errors; third party utilities; and managing and installing applications.
Prerequisites: IT 5231.

5233 Command Language 1 (CL 1) 2-3-3
A course in which students use the IBM OS/400 operating system to learn fourth generation operating systems. Topics include: using Control Language to expedite operations and create accounts, libraries and files and writing Control Language procedures programs. Students need some programming experience.
Prerequisites: None.

5234 Command Language 2 (CL 2) 2-3-3
A continuation of IT 5233. Topics include: writing user-assisting procedures in Control Language and using system commands that enable efficient system management.
Prerequisites: IT 5233.

5235 System i Open Source 2-3-3
An introduction to the System i Open Source environment. Topics include: Linux and Ubuntu operating systems, PHP web scripting, and MySQL database.
Prerequisites: IT 5234.

5240 IBM WebSphere and XML 2-3-3
An introduction to IBM WebSphere software and XML. Topics include: installing, configuring, and maintaining the software; and using XML with the configuration files.
Prerequisites: None.

5241 PC Support/iSeries Access 2-3-3
A course on integrating Microsoft Office with the database capabilities of the iSeries. Topics include: using Microsoft Word, Excel, Access, and Query and transferring data using iSeries Access, FTP, ODBC, and UDA.
Prerequisites: IT 5206, IT 5240.

5247 Systems Analysis & Design 2 2-3-3
A continuation of IT 5207. Topics include: systems design, implementation, and support considerations of the system development life cycle.
Prerequisites: IT 5207.

5251 Structured COBOL 1 4-6-6
Students use the COBOL-85 standard language in the structured programming environment, emphasizing debugging techniques. Assignments use disk, printer, and terminal data.
Prerequisites: IT 5206 (minimum grade C).

5252 Structured COBOL 2 4-6-6
A continuation of IT 5251. Topics include: advanced COBOL techniques using randomly processed disc files and accessing indexed-sequential and direct-access files using keys and algorithms.
Prerequisites: IT 5251 (minimum grade C).

5255 Internet Programming: HTML 2-3-3
An HTML course for Computer Software Development majors. Topics include: Visual Web Developer, writing HTML code, web page publishing with FTP, and cascading style sheets.
Prerequisites: None.

5266 RPG 1 2-3-3
An introduction to RPG programming. Topics include: RPG forms, processing sequential files, data definitions, externally defined files, structured programming techniques, and calculating business reports.
Prerequisites: IT 5291.

5267 RPG 2 2-3-3
A continuation of IT 5266. Topics include: file access and record manipulation, control break processing, tables and arrays, multiple printer files, and modular programming concepts.
Prerequisites: IT 5266.

5268 RPG 3 2-3-3
A continuation of IT 5267. Topics include: interactive applications and advanced programming required to create these applications, display files, advanced data definitions, and error handling.
Prerequisites: IT 5267.

5269 RPG 4 2-3-3
A continuation of IT 5268. Topics include: advanced interactive applications, subfile inquiry, and updates. Includes a project encompassing all aspects of the RPG programming language.
Prerequisites: IT 5268.

5271 Java 1 2-3-3
An introductory course on computer programming using the Java programming language. Topics include: introduction to OOP, classes, applets, controls, event handling, layouts, mathematical operations, looping, conditional statements, functions, arrays, and strings.
Prerequisites: IT 5216, IT 5291, IT 5331, or IT 5455.

5272 Java 2 2-3-3
A continuation of IT 5271. Topics include: application frames, menus, dialogs, multimedia, serialization, streams, JDBC, and database programming.
Prerequisites: IT 5271.

5273 Java 3 2-3-3
A continuation of IT 5272. Topics include: servlets, Java server pages, MVC (Model-View-Controller) patterns, and the Struts tag library.
Prerequisites: IT 5272.

5274 Java 4 2-3-3
A continuation of IT 5273. Topics include: Enterprise Java Beans (EJB), Web services, and Java patterns.
Prerequisites: IT 5273.

5275 C++ Programming 1 3-3-4
An introductory course on computer programming using the C++ programming language. Topics include: mathematical operations, looping, conditional statements, functions, arrays, and strings; methods for solving mathematical problems; and menu-driven programming. Students need basic computer operating systems knowledge and text editor or word processor capability.
Prerequisites: IT 5291.

5276 C++ Programming 2 3-3-4
A continuation of IT 5275. Topics include: graphic functions, structured variables, pointers, bitwise operations, and preprocessor commands. Students use advanced programming techniques including disk I/O operations and command line operations to produce database managers, graphical analysis, and display programs.
Prerequisites: IT 5275.

5277 Object Oriented Programming: C++ 3-3-4
An introductory course on concepts and techniques of Object Oriented Programming (OOP) using the C++ programming language. Topics include: constructors, destructors, polymorphism, inheritance, encapsulation, virtual functions, and overloaded operators.
Prerequisites: IT 5276.

5278 Visual C++ Programming 1 3-3-4
An introductory course on Visual C programming using C Sharp (#). Topics include: programming in C++, object oriented programming, and database applications using ADO.
Prerequisites: IT 5277, IT 5321.

5283 ASP.NET Programming with C# 1 2-3-3
A course on the ASP.NET Framework using C#. Topics include: C# language and syntax, Web forms, server controls, master pages, user control creation, XML, and working with data.
Prerequisites: IT 5291, IT 5453 or IT 5255.

5284 ASP.NET Programming with C# 2 2-3-3
A continuation of IT 5283. Topics include: advanced ASP.NET controls, ADO.NET, and web services.
Prerequisites: IT 5283, IT 5321.

5291 .NET Programming 1 2-3-3
An introductory course on programming logic and methods using Visual Basic.NET. Topics include: the programming development cycle, program design, introduction to VB.NET common controls, variables/constants and data types, and conditional and iterative structure.
Prerequisites: None.

5292 .NET Programming 2 2-3-3
A continuation of IT 5291, emphasizing programming logic while building on Visual Basic .NET fundamentals. Topics include: procedures and functions, common dialogs, arrays, multiple forms, multiple document interfaces, collections, and creating and reading sequential access files.
Prerequisites: IT 5291.

5293 .NET Programming 3 2-3-3
A continuation of IT 5292. Topics include: an introduction to OOP design and implementation, using the .NET framework, developing class modules, and accessing and writing to databases using ADO.NET and SQL.
Prerequisites: IT 5292, IT 5320.

5294 .NET Programming 4 2-3-3
A continuation of IT 5293. Topics include: using .NET programming skills to create Web-based applications in ASP.NET.
Prerequisites: IT 5293, IT 5453 or IT 5255.

5295 .NET Programming 5 2-3-3
A continuation of IT 5294. Students use their .NET programming and ASP.NET knowledge to build, deploy, and locate XML Web services-based solutions.
Prerequisites: IT 5294.

5299 Current Topics in Computer Network Engineering Technology 3-3-4
A personal academic pursuit related to the student's technical field of study mutually agreed upon by the student and supervising faculty member. The Dean of the Center for Innovative Technologies must approve the plan of study prior to registration.
Prerequisites: IT 5122, IT 5151.

5310 Programming Database Applications 2-3-3
An introduction to database programming using COBOL. Topics include: the concepts of database management systems, both hierarchical and relational.
Prerequisites: IT 5252.

5311 IBM DB2 SQL Programming 1 2-3-3
An introductory course on using a relational database to create tables, manipulate data, and extract information. Topics include: designing, creating, and accessing the database. Methods of access include: interactive manipulation, user-written procedures, and access through other languages.
Prerequisites: None.

5312 IBM DB2 SQL Programming 2 2-3-3
A continuation of IT 5311. Students achieve skill levels from intermediate to advanced programming using SQL. Topics include: packages, cursors, and record sets. Methods of access include: interactive manipulation, user-written procedures, and access through other languages.
Prerequisites: IT 5311.

5314 Business Intelligence: Data Warehousing 1 2-3-3
An introduction to the design and methodology for creating data warehouses. Topics include: data cleansing, star schema, and contemporary data mart tools.
Prerequisites: None.

5315 Business Intelligence: Data Warehousing 2 2-3-3
A continuation of IT 5314 in which students create data marts.
Prerequisites: IT 5314.

5320 Database Design and SQL 2-3-3
An introduction to relational database design and the SQL. Topics include: records, fields, data types, tables, normalization, and queries.
Prerequisites: None.

5321 Database Programming & Administration: SQL Server 1 2-3-3
A course on fundamentals of relational database design and implementation using Microsoft SQL Server. Students use the SQL Enterprise Manager and examine objects and their properties. Topics include: SQL groups, databases, table structure, data field types, and query statements.
Prerequisites: IT 5320.

5322 Database Programming & Administration: SQL Server 2 2-3-3
A continuation of IT 5231. Students use the SQL Enterprise Manager to program and administer database objects and their properties. Topics include: stored procedures, advanced database normalization, and advanced query statements to join across tables.
Prerequisites: IT 5321.

5323 Database Programming & Administration: Oracle 1 2-3-3
A course on relational database design and implementation fundamentals using Oracle. Students use the Oracle SQL query language to program and administer database objects and their properties. Topics include: SQL groups, databases, table structure, data field types, and query statements.
Prerequisites: IT 5320.

5324 Database Programming & Administration: Oracle 2 2-3-3
A continuation of IT 5323. Students use the Oracle SQL query language to program and administer database objects and their properties. Topics include: stored procedures, advanced database normalization, and advanced query statements to join across tables.
Prerequisites: IT 5323.

5325 Database Administration 1 2-3-3
An introduction to the knowledge and skills required to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server. Topics include: SQL architecture, SQL installations, file management, security, and administrative tasks and tools.
Prerequisites: IT 5322.

5326 Database Administration 2 2-3-3
A continuation of IT 5325. Students learn to install, configure, administer, and troubleshoot the client-server database management system of Microsoft SQL Server. Topics include: backup strategies, restoration procedures, database monitoring and optimization, data transferring and migration, and database replication.
Prerequisites: IT 5325.

5329 Data Reporting: Crystal Reports 2-3-3
Students learn Crystal Reports as the reporting tool for their VB.NET applications linked to an SQL server database.
Prerequisites: IT 5291, IT 5321.

5331 Internet Programming: ASP 2-3-3
A course on programming dynamic Web pages with Classic Active Server Pages. Students integrate server side Visual Basic Script (VBScript) and HTML to interact with an Access database in a series of complex Web projects. Students enrolled in this course must be proficient using Access database software.
Prerequisites: IT 5291, IT 5453 or IT 5255.

5332 Internet Programming: JavaScript 2-3-3
A course on fundamentals of the JavaScript scripting language. Students work with introductory topics in JavaScript and progress through more advanced topics such as frames and forms. Students must have a thorough knowledge of HTML before entering this course.
Prerequisites: IT 5453 or IT 5255, IT 5291.

5333 Internet Programming: XML 2-3-3
A course on programming interactive Active Server Pages for Web applications. Topics include: creating and displaying an XML document, defining and using entities, and displaying XML documents using cascading style sheets, data binding, and XSL style sheets.
Prerequisites: IT 5320, IT 5453 or IT 5255.

5334 PHP Hypertext Preprocessor and MySQL 2-3-3
An introduction to PHP Web programming and MySQL. Topics include: PHP language, syntax, variables, forms, and functions; MySQL database design, connecting to a MySQL database using PHP, editing MySQL Data via PHP; and building dynamic Web pages using PHP and MySQL.
Prerequisites: IT 5320, IT 5453 or IT 5255.

5335 PHP Hypertext Preprocessor and MySQL 2 2-3-3
A continuation of IT 5334. Topics include: advanced programming techniques and tools used for complex applications.
Prerequisites: IT 5334.

5340 PCSA Design Project 2-3-3
A capstone design project in which students work in teams to resolve a variety of complex assignments.
Prerequisites: EET 7781, IT 5151.

5351 BIS Design Project 1 2-3-3
A capstone design project in which students design a working system using the team concept of project design. The five phases of project development are discussed and the planning, analysis, and design phases are used to complete various team assignments.
Prerequisites: Instructor consent.

5352 BIS Design Project 2 2-3-3
A continuation of IT 5351. Students work in teams to resolve a variety of complex assignments.
Prerequisites: IT 5351.

5355 Project Control for the IT Manager 2-3-3
A course on managing an information technology budget. Topics include: IT resource management including telecommunication and hardware cost control.
Prerequisites: None.

5361 CPDM Design Project 1 2-3-3
Students write a complete eBusiness software suite of programs. The integrated package includes an ASP.NET VB application interacting with a SQL Server database.
Prerequisites: IT 5284, IT 5322.

5362 CPDM Design Project 2 2-3-3
A continuation of IT 5361. Students introduce SQL Stored Procedures into the desktop and Web applications to increase application speed and efficiency.
Prerequisites: IT 5361.

5363 CPDM Design Project 3 2-3-3
A continuation of IT 5362, emphasizing reliability, speed, accuracy, and ease of use. Students develop a complete set of Help Files for the Web applications.
Prerequisites: IT 5362.

5380 Software Engineering Technology Project 2-3-3
A capstone project course in which the instructor guides students through the process of designing and coding a database application. Project phases include mapping out functionality, designing screens, designing the database, and coding the design.
Prerequisites: IT 5293, IT 5321.

5400 Design Principles for Multimedia 2-3-3
A course on fundamental principles and techniques for effective visual composition in print or multimedia applications.
Prerequisites: None.

5405 Design Drawing for Multimedia 1 2-3-3
A course on fundamental techniques for realistic drawing. Topics include: sketching, 3-D drawing, architectural drawing, and storyboarding.
Prerequisites: None.

5406 Design Drawing for Multimedia 2 2-3-3
A continuation of IT 5405, emphasizing large-scale drawings used as part of a presentation.
Prerequisites: IT 5405 (minimum grade C).

5408 Character Design for Multimedia 2-3-3
A course on creating and drawing stylized characters for use in multimedia products. Topics include: fundamentals of figure drawing, drawing from photographs and live models, proportion, and exaggeration.
Prerequisites: IT 5405 (minimum grade C).

5410 Cross-Platform Computer Systems and Applications 2-2-3
An introduction to operating systems software and end-user applications software in Windows and Macintosh computing environments. Topics include: file management, file compressing, printer installation, and other basic processes and procedures for each computing environment.
Prerequisites: None.

5420 Digital Media Concepts 2-3-3
An introduction to software, hardware, and peripheral equipment used to create, revise, and produce digital images for multimedia products. Equipment used includes: scanners, printers, and digital cameras.
Prerequisites: None.

5432 Interactive Interface Design 2-3-3
An introduction to creating, revising, and producing interactive multimedia presentations.
Prerequisites: IT 5453 (minimum grade C).

5435 Web Design 1 2-3-3
An introduction to creating dynamic Web site content using Macromedia Dreamweaver.
Prerequisites: IT 5453 (minimum grade C).

5436 Web Design 2 2-3-3
A continuation of IT 5435, focusing on database design and scripting using Macromedia Dreamweaver.
Prerequisites: IT 5320, IT 5435 (minimum grade C for both).

5441 Beginning 2D Graphics: Bitmap 2-3-3
An introduction to creative digital design techniques. Topics include: principles for creating images using Adobe Photoshop, photo restoration and manipulation, and Web interface design.
Prerequisites: IT 5400 or ART 1692, IT 5410, IT 5420 (minimum grade C for all), and MAT 1124 or MAT 1151 (minimum grade C) or appropriate placement test score.

5443 Beginning 2D Graphics: Vector 2-3-3
An introduction to vector art creation, emphasizing color and composition, and stylized and photorealistic illustration techniques. Topics include: principles for creating images with Adobe Illustrator, identity design, layout, and line weight and quality.
Prerequisites: IT 5400 or ART 1692, IT 5410, IT 5420 (minimum grade C for all), and MAT 1124 or MAT 1151 (minimum grade C) or appropriate placement test score.

5444 Advanced 2D Graphics 2-3-3
A continuation of IT 5441 and IT 5443, focusing on design for advertising and packaging and brand identity. Topics include: advanced techniques for creating, revising, and producing images using Adobe Photoshop and Adobe Illustrator.
Prerequisites: IT 5449.

5445 Multimedia Design 1 2-3-3
An introduction to techniques for creating and manipulating images using Macromedia Flash.
Prerequisites: IT 5453 (minimum grade C).

5446 Multimedia Design 2 2-3-3
A continuation of IT 5445, emphasizing action scripting with Macromedia Flash.
Prerequisites: IT 5445 (minimum grade C).

5447 Beginning 2D Graphics: Web 2-3-3
An introduction to techniques for creating, revising, and producing images using Macromedia Fireworks.
Prerequisites: IT 5453 (minimum grade C).

5448 Multimedia & Web Design Portfolio Review 1-1-1
An assessment of skills required to enter upper-level courses in the Multimedia & Web Design program. Students take a technical skills exam and present a portfolio to a panel of evaluators. Students receive grades of S or U for this course. Students must pass the course to be eligible for cooperative education assignments. Students who do not pass the course may make one additional attempt.
Prerequisites: ENG 1002, IT 5441, IT 5443, IT 5445 (minimum grade C for all).

5449 Graphic Design Portfolio Review 1-1-1
An assessment of skills required to enter upper-level courses in the Graphic Design program. Students take a technical skills exam and present a portfolio to a panel of evaluators. Students receive grades of S or U for this course. Students must pass the course to be eligible for cooperative education assignments. Students who do not pass the course may make one additional attempt.
Prerequisites: ENG 1002, IT 5405 or ART 1690, IT 5540, and GC 1423 or IT 5456 (minimum grade C for all).

5451 Beginning 3-D Visualization 3-4-5
An introduction to a variety of 3-D basic skills using Maya. Topics include: polygon, NURBS, and subdivision surface modeling; texturing; basic animation; lighting; and rendering.
Prerequisites: IT 5449.

5452 3-D Animation and Effects 3-4-5
A continuation of IT 5451. Topics include: advanced texturing and rendering techniques, interaction of soft and rigid body solvers, dynamics, and complex manipulation of various three-dimensional attributes using nodes and connections in Maya.
Prerequisites: IT 5451 (minimum grade C).

5453 Web Development 1 2-3-3
An introduction to Web site design using HTML, XHTML, and cascading style sheets.
Prerequisites: IT 5410, IT 5420.

5454 Web Development 2 2-3-3
A continuation of IT 5453. Topics include: using cascading style sheets and ensuring cross-browser usability of Web sites.
Prerequisites: IT 5453 (minimum grade C).

5455 Web Development 3 2-3-3
A continuation of IT 5454. Topics include: using JavaScript to manipulate rendered HTML pages, create Web pages dynamically, and render data from XML files and remote scripting (Ajax); and using the Document Object Model and the Browser Object Model.
Prerequisites: IT 5291, IT 5454 (minimum grade C for both).
Prerequisites: IT 5454, IT 5291 (minimum grade C for both).

5456 Desktop Publishing: QuarkXPress 2-3-3
An introduction to desktop publishing techniques for creating, revising, and producing print and multimedia materials using QuarkXPress. Topics include: selecting appropriate page layouts, formatting text, positioning graphics, and applying appropriate typographic and design enhancements.
Prerequisites: IT 5441, IT 5443 (minimum grade C for both).

5457 Multimedia & Web Design Capstone Project 4-6-6
Working in teams, students develop a Web-based product for an external client. Activities include: audience, client, and market analysis; designing product architecture and navigation schema; organizing materials; developing and producing content; and usability testing. Students present project results to reviewers. Students who do not complete the course successfully may make one additional attempt.
Prerequisites: Completion of all other Multimedia and Web Design degree requirements (minimum grade C for all).

5458 Web Development: Special Topics 2-3-3
A course on special topics or new technologies related to Web site design and development. Content and emphasis may vary from term to term. May be repeated for credit.
Prerequisites: IT 5454 (minimum grade C).

5460 Packaging Design 2-3-3
A course on fundamentals of packaging design. Topics include branding, graphics, typography, materials, and functionality.
Prerequisites: IT 5449 (minimum grade C) or instructor consent.

5522 Audio 1: Principles of Audio Recording 2-3-3
An introductory course on principles of audio and sound recording. Topics include: sound waves, acoustics and the audio spectrum, console and signal flow, equalization and compression, microphones and their placement, effects, digital audio formats, and MIDI basic concepts.
Prerequisites: None.

5523 Audio 2: Editing and Mixing 2-3-3
An introductory course on using the Pro Tools digital audio workstation and the Pro Control work surface. Topics include: session set-up, routing, patch bay, advanced signal flow, the Pro Tools software interface, and basic editing and mixing functions.
Prerequisites: IT 5522 (minimum grade C).

5524 Audio 3: Production and Sound Design 3-4-5
An advanced course on sound design and recording techniques for radio, television, and film. Topics include: voice-over recording and talent direction, creating and implementing sound effects, advanced music editing, and mix-to-picture techniques.
Prerequisites: IT 5523 (minimum grade C).

5525 Multi-Track Recording 3-4-5
An advanced course on multi-track recording techniques from pre-production through final mix. Topics include: session flow and management and advanced microphone placement.
Prerequisites: IT 5524 (minimum grade C).

5526 Advanced Mix Techniques 2-3-3
A continuation of IT 5523, focusing on advanced mix techniques using five-channel (5.1) surround sound. Topics include: bass management and recording for surround and final output.
Prerequisites: IT 5524 (minimum grade C).

5530 Introduction to Broadcast Television Production 2-3-3
A course on key skills and roles for creating television news and other programs. Topics include: operation of camera, tape, chyron, teleprompter, and audio controls; technical direction; studio lighting; field production; and content creation and development.
Prerequisites: IT 5220 (minimum grade C).

5531 Advanced Videography 2-3-3
A continuation of IT 5220, emphasizing advanced and specialized techniques for videography, gripping, and lighting.
Prerequisites: IT 5220, IT 5530 (minimum grade C for both).

5532 Lighting for Digital Video 2-3-3
A course on theoretical, technical, and aesthetic aspects of lighting for digital video in cinema and television production.
Prerequisites: IT 5530 (minimum grade C).

5540 Digital Studio 1 2-3-3
A course on concepts and techniques for effective and creative communication using digital media. Topics include: designing layouts in a digital setting, using typography and color, and creating effective relationships between text and visual elements.
Prerequisites: IT 5400, IT 5441, IT 5443 (minimum grade C for all).

5541 Digital Studio 2 2-3-3
A continuation of IT 5540. Students complete several digital design projects suitable for a professional portfolio, while demonstrating the ability to integrate several software applications to create finished products.
Prerequisites: IT 5540 (minimum grade C), IT 5449.

5543 Creating the 3D Animated Short 3-4-5
A continuation of IT 5452. Students work as a team to create a short animation of a story or script. Topics include: advanced techniques for 3-D modeling, lighting, rendering, and animation with Maya.
Prerequisites: IT 5452 (minimum grade C).

5545 Video Post-Production: 3D Special Effects 3-4-5
An introduction to Maya emphasizing its use as a video post-production tool. Topics include: basic modeling, texturing, lighting, and dynamics; and animation principles and techniques applicable to video post-production.
Prerequisites: IT 5441, IT 5443 (minimum grade C for both).

5546 Audio/Video for Multimedia Applications 2-3-3
An introduction to audio/video hardware, applications, and techniques, focusing on audio/video used for multimedia and Web products. Topics include: music editing and sound design, video capture and editing, camera and lighting techniques, and optimizing audio and video for Web distribution.
Prerequisites: IT 5410, IT 5420 (minimum grade C for both).

5560 AVP Portfolio Production 1-2-2
A course in which students prepare a professional portfolio and demo reel to describe their academic and work achievements, and complete professional networking activities. Audio and video professionals assess student portfolios.
Prerequisites: Completion of AVP core courses (minimum grade C for all).

5570 GRD/MWEB Portfolio Production 1-2-2
A course in which students prepare a professional portfolio to describe their academic and work achievements, and complete professional networking activities. Multimedia professionals assess student portfolios.
Prerequisites: Completion of GRD or MWEB core courses (minimum grade C for all).

5571 Graphic Design Capstone Project 4-6-6
Working in teams, students develop print and multimedia graphics for an external client. Activities include: analyzing audience, client, and market; product design and planning; organizing materials; developing and producing content; and usability testing. Students present project results to reviewers. Students who do not complete the course successfully may make one additional attempt.
Prerequisites: Completion of all other Graphic Design degree requirements (minimum grade C for all).

5598 Workshop in Multimedia Information Design Var-Var-Var
Group discussion and practice of selected topics related to multimedia information design. Course content and emphasis may vary from year to year.
Prerequisites: Instructor consent.

5599 Special Topics in Multimedia Information Design Var-Var-Var
A course in which students who are seeking advanced standing or implementing independent research or specialized multimedia information design projects complete individual studies and special projects related to multimedia information design. Enrollment requires prior MID program chair and Dean of the Center for Innovative Technologies consent. May be repeated for credit.
Prerequisites: Program chair consent.

9350 Introduction to Computer Software Development Careers 1-1-1
A course that introduces students to the computer software development majors and associated career paths.
Prerequisites: None.

9500 Cooperative Education - Information Technologies (Alternating) 1-40-2
Students participate in a full-time (minimum of 36 hours per week) paid field learning experience related to their academic discipline and career goals. Students must adhere to the Center for Innovative Technologies Division's cooperative education policies and procedures.
Prerequisites: Full-time status; admitted to an IT degree program; 2.0 minimum GPA.

9501 Cooperative Education - Information Technologies (Parallel) 1-20-1
Students participate in a paid field learning experience directly related to their academic discipline for 15 to 30 hours per week, while registered for a minimum of eight credit hours of program course requirements during that same term. Students must adhere to the Center for Innovative Technologies Division's cooperative education policies and procedures.
Prerequisites: Admitted to an IT degree program; 2.0 minimum GPA.

ITE Industrial Training

8500 Problems-Mechanical Apprentice Var-Var-Var
Individual study and special projects pertaining to mechanical areas of specialization. Open to students with valid documented course academics, work experience, professional certification and/or licensing, or completed formal training programs.
Prerequisites: Completed formalized training program/apprenticeship.

8700 Problems-Electrical Apprentice Var-Var-Var
Individual study and special projects pertaining to electrical/electronic areas of specialty. Open to students with documented valid academics or work experience, professional certification and/or licensing, or completed formal training programs.
Prerequisites: Completed formalized training program apprenticeship/licensing.

8900 Problems-Plumber/Pipefitter Var-Var-Var
Individual study and special projects pertaining to plumber/pipefitting areas of specialization. Open to students with valid documented course academics, work experience, professional certification and/or licensing, or completed formal training programs.
Prerequisites: Completed formalized training program/apprenticeship.

ITM International Trade Management
ITP Interpreter Training

ITM International Trade Management

2980 Introduction to International Business 3-0-3
An overview of international business and the institutions that affect business today. Topics include: the scope and challenges of international trade, concepts and theories, market entry strategies, cultural dynamics, business customs and practices, political environments, and legal systems.
Prerequisites: None.

2981 International Marketing 3-0-3
An overview of the components of international marketing. Topics include: determining export potential, international market research, internationalization of products, pricing methods, market entry strategies, promotional techniques, and long-term marketing planning.
Prerequisites: MKT 2901.

2983 Import and Export Essentials 4-0-4
A course on international order processing and shipping. Topics include: required documentation; selecting forwarders, carriers, and insurance; intercompany communication; responsibilities of all parties to the contract of carriage for shipments; and trade, tariff, and exchange regulations and restrictions.
Prerequisites: MKT 1880.

9252 Cooperative Education International Trade Management 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ITM program, 2.0 minimum GPA.

9253 Cooperative Education International Trade Management-Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the ITM program, 2.0 minimum GPA.

ITP Interpreter Training

1086 Beginning ASL 1 3-2-4
An introduction to American Sign Language. Topics include: ASL vocabulary; Deaf culture; grammar; and beginning conversational, comprehensive, and expressive skills.
Prerequisites: None.

1087 Beginning ASL 2 3-2-4
A continuation of ITP 1086. Topics include: ASL vocabulary; Deaf culture; grammar; and beginning conversational, comprehensive, and expressive skills.
Prerequisites: ITP 1086 or equivalent.

1088 Beginning ASL 3 3-2-4
A continuation of ITP 1087. Topics include: ASL vocabulary; Deaf culture; grammar; and beginning conversational, comprehensive, and expressive skills.
Prerequisites: ITP 1087 or equivalent.

1089 Advanced Fingerspelling 3-0-3
An advanced course on producing the letters of the manual alphabet and incorporating them into the interpreting process. Topics include: developing and practicing strategies that improve understanding of fingerspelling embedded in signed utterances and improving receptive and expressive skills.
Prerequisites: ITP 1091 or equivalent.

1091 Intermediate American Sign Language 1 3-2-4
A course on the linguistics of American Sign Language. Topics include: receptive and expressive readiness skills for acquiring ASL targeted vocabulary and grammar, and fingerspelling.
Prerequisites: ITP 1088 or advisor consent.

1092 Intermediate American Sign Language 2 3-2-4
A continuation of ITP 1091. Topics include: written information on targeted grammatical features, receptive and expressive mastery of these features, targeted vocabulary items, and producing student-generated ASL sentences.
Prerequisites: ITP 1091 or equivalent.

1093 Intermediate American Sign Language 3 3-2-4
A continuation of ITP 1092. Topics include: additional information on targeted grammatical features, receptive and expressive mastery of prepared dialogues, interpreting English sentences into ASL, and producing short student-generated ASL narratives.
Prerequisites: ITP 1092 or equivalent.

1094 Advanced American Sign Language 1 3-2-4
An advanced course on the linguistics of American Sign Language, emphasizing native-like signing. Topics include: demonstrating target vocabulary and grammatical features through prepared dialogues and short narratives, interpreting English paragraphs into ASL, and producing student-generated ASL dialogues.
Prerequisites: ITP 1093 and pass assessment.

1095 Advanced American Sign Language 2 3-2-4
A continuation of ITP 1094. Topics include: additional practice of ASL communicative skills, vocabulary, and grammatical features; and continued development of expressive and receptive interpreting skills.
Prerequisites: ITP 1094 or equivalent.

1096 Advanced American Sign Language 3 3-2-4
A continuation of ITP 1095. Topics include: additional ASL vocabulary and grammatical features, and mastering simultaneous interpreting using short stories and student-generated dialogues.
Prerequisites: ITP 1095 or equivalent.

5459 Beginning Fingerspelling 3-0-3
An introduction to expressive and receptive skills related to fingerspelling. Topics include: Lexical Borrowing and numbers.
Prerequisites: None.

5460 Interpreting for the Deaf 3-0-3
A course that provides a framework for understanding the interpreting field. Topics include: the code of ethics and physical factors.
Prerequisites: None.

5461 Preparation for ITP Practicum 3-0-3
An advanced course that combines American Sign Language with the cognitive process of interpreting. Topics include: the interpreter's role in various settings, the interpreting process, physical factors, and modeling and practicing language variations.
Prerequisites: ITP 1093 (minimum grade C) and pass assessment.

5462 Community Resources for Deaf 3-0-3
A course on human service agencies that serve the deaf population. Topics include: an overview of the laws and legal implications of interpreting situations.
Prerequisites: None.

5463 Role of Interpreter 3-0-3
A continuation of ITP 5460. Topics include: history, trends, and issues in the interpreting field. Includes information on the written portion of the RID National Certification Test.
Prerequisites: ITP 5460.

5464 Sign-to-Voice Interpreting 1 3-2-4
A course on improving receptive skills in preparation for sign to voice interpreting and transliterating situations.
Prerequisites: ITP 1093 (minimum grade C).

5465 Sign-to-Voice Interpreting 2 3-2-4
A continuation of ITP 5464. Topics include: receptive skills and skill development in transforming signed expressions into vocal expressions.
Prerequisites: ITP 5464 (minimum grade C).

5466 Sign-to-Voice Interpreting 3 3-2-4
A continuation of ITP 5465. Topics include: techniques to help the interpreter develop the skills and poise needed to handle frustrations and problems that arise in sign to voice interpreting and transliterating situations.
Prerequisites: ITP 5465 or equivalent.

5467 Sign-to-Voice Interpreting 4 3-2-4
A continuation of ITP 5466. Students learn advanced techniques in sign to voice interpreting and transliterating.
Prerequisites: ITP 5466 or equivalent.

5468 Deaf-Blind Communications 3-0-3
An intermediate to advanced course on the specific communication skill set for the deaf-blind population. Topics include: various communication needs of deaf-blind individuals, communication modes/languages, and application and feedback.
Prerequisites: ITP 1091 (minimum grade C).

5470 Transliterating 1 **4-0-4**
A course on transmitting spoken English into one of several English-related or English-oriented varieties of manual communication for communication between deaf and hearing people.
Prerequisites: ITP 1093 (minimum grade C).

5471 Medical/Technical/Legal Interpreting **4-0-4**
A course on technical sign vocabulary used in business, engineering, mathematics, and biology. Topics include: protocol and sign vocabulary for medical, mental health, social work, and legal interpreting settings.
Prerequisites: ITP 1093.

5472 Specialized Interpreting **4-0-4**
An introduction to ASL vocabulary related to sexual behavior/sexual abuse and drug use/abuse. Topics include: increasing student comfort and skill level for interpreting in the areas of OB/GYN, Alcoholics Anonymous, Narcotics Anonymous, counseling, and court settings.
Prerequisites: ITP 1093.

5474 Vocabulary Building for Interpreters **3-0-3**
A course on developing receptive and expressive skills in sign language vocabulary emphasizing American Sign Language.
Prerequisites: ITP 1091 (minimum grade C).

5475 Educational Interpreting 1 **3-0-3**
An overview of educational interpreting. Topics include: the educational setting, code of ethics, inservicing, the IEP process, and the Ohio Department of Education's Educational Interpreter Guidelines.
Prerequisites: ITP 1091 (minimum grade C).

5476 Educational Interpreting 2 **3-0-3**
Hands-on practice and feedback pertaining to expressive and receptive skills in educational settings. Classroom vocabulary focuses on several educational subjects. Topics include: the specific needs of learners at each age and how interpreters can best meet those communication needs.
Prerequisites: ITP 5475 (minimum grade C).

5477 Transliterating 2 **4-0-4**
A continuation of ITP 5470. Topics include: extensive hands-on practice and feedback related to expressive and receptive skills in transliterating and several different modes of English-related or English-oriented sign systems.
Prerequisites: ITP 5470 (minimum grade C).

5478 Religious Interpreting **3-0-3**
A course emphasizing skills needed for interpreting/transliterating in religious settings. Topics include: vocabulary building and conceptual accuracy.
Prerequisites: ITP 1091 (minimum grade C).

5479 Theatrical Interpreting **3-0-3**
A course on the art of interpreting for theater and related settings. Topics include: developing skills in the processes of script translation, preparation, and performance.
Prerequisites: ITP 1091 (minimum grade C).

5483 General Practicum **2-10-3**
Students are assigned to various educational or community settings to either observe the interpreters or participate in the interpreting process under the appropriate supervision. Students spend nine to twelve hours per week at their assigned sites and participate in weekly seminars on campus.
Prerequisites: ITP 5461.

5484 Limited Practicum **1-3-1**
Students are assigned to various educational institutions and community agencies. Students spend three hours per week observing, and subsequently assuming, the role of the interpreter under supervision. Students participate in weekly seminars.
Prerequisites: ITP 5461.

5485 Parallel Practicum **2-5-2**
Students are assigned to various educational institutions and community agencies. Students spend five hours per week observing, and subsequently assuming, the role of the interpreter under supervision. Students participate in weekly seminars.
Prerequisites: ITP 5461.

5499 Special Studies in Interpreter Training **Var-Var-Var**
Individual study and special projects pertaining to interpreter training. Open to students wishing to conduct independent study and/or research under the supervision of a faculty member. Before registration, the student must have the plan of study approved by the program chair and the Dean of Humanities and Sciences.
Prerequisites: ITP 1091.

ITT Industrial Trades

1301 Principles of Machining 1 **3-0-3**
An introductory course in machining principles. Topics include: basic hand and layout tools, layout techniques, measuring instruments related to basic benchwork, and an introduction to the drilling and grinding family of machine tools.
Prerequisites: MAT 1171.

1302 Principles of Machining 2 **3-0-3**
A continuation of ITT 1301. Topics include: lathe; planning; milling operations; tooling; and in-depth coverage of turning, facing, indexing, threading, boring, reaming, dovetail cutting, drilling, and helical milling operations.
Prerequisites: ITT 1301.
Corequisites: MAT 1172.

1303 Principles of Machining 3 **3-0-3**
Introduction to computerized numerical controlled (CNC) machinery. Topics include: programming formats, terminology, and methods along with the binary number system, control tape encoding and decoding, and axis control. Emphasis on CNC milling operations.
Prerequisites: ITT 1302.
Corequisites: MAT 1173.

1304 Principles of Machining 4 **2-0-2**
A continuation of ITT 1303. Topics include: programming for milling operations, linear and circular interpolation, cutter diameter compensation, G-Codes, M-Codes, and letter address commands for the CNC mill.
Prerequisites: ITT 1303.

1305 Principles of Machining 5 **2-0-2**
CNC lathe operations covering programming for turning operations. Topics include: linear and circular interpolation, tool nose radius compensation, G-Codes, M-Codes, letter addresses, word address commands for the NC lathe, and use of multiple repetitive cycles.
Prerequisites: ITT 1303.

1306 EDM/Grinding Principles **2-0-2**
Introduction to electrical-discharge machining, grinding operations, and machines. Topics include: surface, cylindrical, internal, and centerless grinding operations; abrasive and cutting materials of ceramic, diamond, and carbide as applied to grinding operations; and speed/feed rates and grinding fluids.
Prerequisites: ITT 1303.

1307 Machinery's Handbook **2-0-2**
Practical application of the most widely used handbook for engineers, technicians, and tradesmen in the machine tool industry. Topics include: interpretation and application of tables, graphs, charts, and formulas.
Prerequisites: ITT 1302, MAT 1172.

1308 Introduction to Hydraulics **3-0-3**
Introduction to fundamental hydraulic principles. Topics include: terms, graphic symbols, hydraulic actuators, directional control devices, hydraulic motors, and basic pump operation.
Prerequisites: MAT 1171.
Corequisites: MAT 1172.

1309 Distribution Systems (Hydraulics) **3-0-3**
Introduction to hydraulic pumps. Topics include: pump characteristics, displacement, and efficiency; external and internal gear pumps; balanced and unbalanced vane pumps; radial and axial pumps; and piston and bent-axis piston pumps and their applications.
Prerequisites: ITT 1308.

1310 Pneumatic Systems **3-0-3**
A course on basic principles of pneumatics. Topics include: properties of air, measuring air flow, compressed air, gas laws, pneumatic controls, air logic, graphic symbols, terms, and definitions.
Prerequisites: MAT 1172.

1311 Material Handling Systems **3-0-3**
Design, application and maintenance of conveyor systems. Topics include: monorail, skate, roller, belt, hinged, chain, slant, and power feed conveyors along with setup, machine tool, and work cell interface.
Prerequisites: None.

1312 Transmission Systems (Mechanical) 2-0-2
A study of mechanical drive and transmission systems. Topics include: belt and chain drives, gear trains, planetary gear trains, screw mechanisms, shaft coupling, sheaves, sprockets, bearings, and speed control.
Prerequisites: MAT 1173.

1313 Preventative Maintenance - Drive Systems 3-0-3
Preventive maintenance and troubleshooting of drive and power transmission systems and related components. Topics include: removal, installation, and alignment of gears, belts, gear trains, chains, sheaves, sprockets, shaft couplers, and bearings; lubrication; and safety.
Prerequisites: ITT 1312.

1314 Heavy Machinery Transport and Rigging 3-0-3
A course on removal, installation, and setup of heavy machinery. Topics include: moving and rigging, foundations, setting bases, shimming and leveling, anchoring, repair, and safety.
Prerequisites: ITT 1316.

1315 Fixtures and Gages 2-0-2
A course on workholding and measuring devices used in the machine tool trades. Topics include: design of workholding devices, jigs, and fixtures used in machining processes; introduction to the emerging concept of flexible fixtures along with considerations for clamping, loading, and locating the work piece; and measuring devices (gages) such as plug, ring, snap, feeler, and indicator.
Prerequisites: ITT 1364.

1316 Equipment and Instrumentation 3-0-3
A course in basic equipment and instrumentation utilized in machine tool trades. Topics include: proper use, care, and selection of hand tools and hand held power tools, calibration, setup, and use of measurement gages and instrumentation.
Prerequisites: None.

1317 Die Design 1 (Cutting) 2-0-2
A study of the design of cutting dies used in shearing operations. Topics include: fine blanking, steel-rule, nibbling, piercing, trimming, compound, progressive, and transfer cutting dies.
Prerequisites: ITT 1365.

1318 Die Design 2 (Forming) 2-0-2
Conventional practices in the design and construction of forming dies. Topics include: single pad, double pad, solid, and draw-forming dies.
Prerequisites: ITT 1365.

1319 Die Design 3 2-0-2
Conventional practices in the design and construction of sheet metal dies. Topics include: materials, spacers, stops, die blocks, pilots, assemblies, applications, layout, and interpretation of multi-view drawings.
Prerequisites: ITT 1365.

1320 Metallurgy 1 2-0-2
An introduction to metallurgy and properties of ferrous metals. Topics include: metallurgy of iron alloys and tool steel, alloying elements and their effects on steel, alloy numbering system, heat treatment, hardening, tempering, stress relief, normalizing, and hot and cold forming.
Prerequisites: None.

1321 Metallurgy 2 2-0-2
A continuation of ITT 1320 related to non-ferrous metals. Topics include: metallurgy and properties of alloys, copper, aluminum, and magnesium; and weldability and effects of welding related to corrosion, oxidation, and degradation of materials.
Prerequisites: ITT 1320.

1322 Welding Processes 1 1-3-2
Introduction to basic welding processes. Topics include: safety, heat transfer, energy, temperature, metal transfer, and deposition rates. The three most common welding processes of oxyacetylene welding, shielded metal arc welding, and gas metal arc welding are discussed and applied.
Prerequisites: MET 7111.

1323 Welding Processes 2 1-3-2
A continuation of ITT 1322. Topics include: shielded metal arc welding in flat and horizontal positions; butt, lap, and tee joints; and plate thickness.
Prerequisites: ITT 1322.

1324 Welding Processes 3 1-3-2
A continuation of ITT 1323 using shielded metal arc welding for vertical up, down, and overhead positions. Topics include: stringer beads, (3G) square butt joint, (3F) lap joint, (3F) tee joints, and overhead (4G), (4F) welds.
Prerequisites: ITT 1323.

1325 Welding Processes 4 1-3-2
An advanced course in shielded metal arc welding. Topics include: root, hot, filler, and cover passes, plate preparation, restarting a weld bead, preheating and post-heating, and weld testing.
Prerequisites: ITT 1324.

1326 Welding Processes 5 1-3-2
Introduction to gas metal arc welding (GMAW). Topics include: equipment, power supplies, metal transfer, wire melting and deposition rates, weld pool control, spot welding, setup, flat position, (1G) and (1F) flat position, and horizontal (2G) and (2F) positions.
Prerequisites: ITT 1325.

1327 Welding Processes 6 1-3-2
An advanced course in gas metal arc welding. Topics include: vertical up (3G) and (3F) positions; vertical down (3G) and (3F) positions; overhead (4G) and (4F) positions; pulsed-arc metal transfer; axial spray; flux cored arc welding; principles of operation, advantages; and practices.
Prerequisites: ITT 1326.

1328 Welding Processes 7 1-3-2
Introduction to gas tungsten arc welding. Topics include: principles of operation, types of tungsten, shaping, welding equipment, welding currents, shielding gasses and gas flow, torch angle, filler rod manipulation, contamination, and standard welding positions.
Prerequisites: ITT 1324.

1329 Welding Processes 8 1-3-2
An advanced course in gas tungsten arc welding of plate material. Topics include: mild steel, stainless steel, and aluminum plate materials; metal preparation; and practice of all welding positions with these materials.
Prerequisites: ITT 1328.

1330 Welding Processes 9 (Pipe) 1-3-2
Welding processes for pipe using shielded metal arc welding and gas tungsten arc welding. Topics include: pipe and tubing materials; joint preparation and fit up; welding in (1G) horizontal, (2G) vertical fixed, (5G) horizontal fixed and (6G) 45 degree inclined positions; root penetration and reinforcement; backing gas; filler metal; hot pass; cover pass; and destructive and non-destructive testing.
Prerequisites: ITT 1324, ITT 1328.

1360 Interpreting Engineering Drawings 1 2-0-2
An introduction to basic blueprint reading related to mechanical and manufacturing industries. Topics include: sheet layout, line types and purpose, orthographic projection, technical sketching, scales, measurements, and dimensioning.
Prerequisites: None.
Corequisites: MAT 1171.

1361 Interpreting Engineering Drawings 2 2-0-2
Interpretation of working, machine detail, assembly, and sectional drawings. Topics include: forgings, machine tapers, castings, holes, dovetails, marks, dimensioning, drawing conventions, and shop terms.
Prerequisites: ITT 1360.

1362 Interpreting Engineering Drawings 3 2-0-2
A course in 3-D modeling and multiview drawings. Topics include: methods to enhance visual interpretation, depth of perception, and concepts of creating multiview drawings and sketches from 3-D models.
Prerequisites: ITT 1361.

1363 Interpreting Engineering Drawings 4 2-0-2
Introduction to geometric dimensioning and tolerancing based on ASME Y14.5M-1994 standard. Topics include: fundamental concepts of true position tolerancing, symbols, rules, definitions, and conventions used to describe the size, form, orientation, and location of part features.
Prerequisites: ITT 1362, MAT 1172.
Corequisites: MAT 1173.

1364 Interpreting Detail Drawings 1 (Tooling) 2-0-2
A course on interpreting detail and assembly drawings relative to tool machining processes. Topics include: interpreting detail and assembly drawings of small tools, tooling design, and detailing practices related to turning, milling, and boring operations.
Prerequisites: ITT 1363.

1365 Interpreting Detail Drawings 2 (Die Making) 2-0-2
A course on interpreting detail and assembly drawings relative to the manufacture of dies. Topics include: interpreting detail and assembly drawings related to the fabrication of blank, pierce, and cutoff dies.
Prerequisites: ITT 1363.

1366 Interpreting Detail Drawings 3 (Gears and Cams) 2-0-2
A course on interpreting detail and assembly drawings related to the manufacture of gears and cams. Topics include: interpreting detail and assembly drawings related to the fabrication of gears, gear trains, and cams; interpreting displacement diagrams, symbols, terminology; and machining operations.
Prerequisites: ITT 1363.

1367 Interpreting Architectural Drawings 2-0-2
Interpreting building plans relative to identification and location of building utilities. Topics include: specification symbols; nomenclature related to waste, water, gas, steam, HVACR, electrical, fire, smoke, alarm and detection systems; and building construction details.
Prerequisites: None.

1368 Interpreting Electrical Drawings 2-0-2
A course on interpreting electrical/electronic schematics and diagrams. Topics include: commonly used graphic symbols; identification of schematic, ladder, riser, block, control, connection, and outline diagrams; development of interpreting skills relative to signal flow; and power distribution.
Prerequisites: None.
Corequisites: ITT 1901.

1369 Computer-Aided Drafting (POM) 2-0-2
An introductory course on computer-aided drafting geared toward physical facilities, maintenance, and operations. Topics include: two-dimensional drawing creation, revision of existing physical layout drawings, basic commands, and symbol libraries. Students use AutoCad software and associated support packages.
Prerequisites: ITT 1367, ITT 1368.

1370 Interpreting Control Diagrams 2-0-2
A course on interpreting electrical/electronic control diagrams. Topics include: basic circuit analysis, relay logic control (ladder diagrams), programmable controls, devices, symbols, and basic troubleshooting.
Prerequisites: ITT 1368, ITT 1918.

1371 Interpreting Power Distribution Diagrams 2-0-2
A course on interpreting diagrams and drawings related to voltage and current distribution in commercial and industrial environments. Topics include: branch circuits, switch control, lighting, emergency power, over-current, calculations, specifications, NEC requirements, materials, and riser diagrams.
Prerequisites: ITT 1368.

1901 Introduction to Electricity Direct Current 2-0-2
An introduction to principles of direct current. Topics include: Ohm's Law, Power Laws, Kirchhoff's Voltage and Current Laws, series and parallel circuits, steady state capacitance and inductance.
Prerequisites: None.
Corequisites: MAT 1171.

1902 Introduction to Electricity Alternating Current 3-0-3
An introduction to principles of alternating current. Topics include: capacitive and inductive reactance; impedance; series and parallel RC, RL, and RLC circuits; resonant circuits; transformers; power factor correction; and three-phase systems.
Prerequisites: ITT 1901.
Corequisites: MAT 1172.

1903 Introduction to Magnetic Circuits 2-0-2
An introduction to the integral part magnetism plays in the development and application of generators, motors, and transformers. Topics include: magnetic fields, flux density, permeability and reluctance of magnetic materials, and Faraday's Law of Electromagnetic Induction.
Prerequisites: ITT 1902.
Corequisites: MAT 1173.

1904 Semiconductor Devices Principles and Applications 2-3-3
An introduction to semiconductor theory, devices, and circuit applications. Topics include: diodes, rectifiers and regulators, transistors, small and large signal amplifiers, operational amplifiers, field-effect devices, silicon controlled rectifiers, uni-junction devices, DIACs, and TRIACs.
Prerequisites: ITT 1902.

1905 Industrial Controls (Electrical) 2-0-2
An advanced course in electronic controls for DC and AC motors. Topics include: permanent magnet and DC shunt drive systems, SCR speed control, eddy current drives, AC variable speed drives, variable frequency drives, closed and open loop systems, and speed and torque characteristics.
Prerequisites: ITT 1904.
Corequisites: MAT 1173.

1906 Digital Electronics 3-0-3
An introduction to digital logic theory, devices, and basic circuits. Topics include: binary, octal, and hexadecimal numbering systems; basic Boolean algebra; basic logic gates and truth tables; latches; flip/flops, and basic circuit design.
Prerequisites: ITT 1904.

1907 Electronic System Diagnostics 2-0-2
A course on development of schematic analysis and troubleshooting techniques. Topics include: application of principles for analysis, failure, and correction of electrical circuits and devices; modification of circuit and device specification to increase reliability; and introduction to soldering techniques and printed circuit board repair.
Prerequisites: ITT 1904.

1908 Practical Applications (Electrical) 3-0-3
Practical application of electrical systems and control theory for commercial and industrial facilities. Topics include: power systems, distribution, motors, controls, and connection and interconnection methods.
Prerequisites: ITT 1902.

1909 Detection and Alarm Systems 1-3-2
Development and practical application of detection and alarm systems utilized in industrial, commercial, and residential settings. Topics include: motion, infrared, heat, smoke, fire, and carbon monoxide detection devices; open and closed loop system design; and audio and video monitoring.
Prerequisites: ITT 1904.

1910 Electrical Maintenance Methods 3-0-3
A course on testing and maintenance practices for electrical systems. Topics include: testing and maintenance procedures for protective insulation, over-current devices, transformers, controls and distribution systems, and instrumentation.
Prerequisites: ITT 1903, ITT 1903.

1911 National Electric Code (NFPA 70) 2-0-2
A study of national and local codes. Topics include: residential, commercial, and industrial electrical construction practices; equipment; code interpretation; and limitations.
Prerequisites: ITT 1902.

1912 Principles of Electricity (HVACR) 1-3-2
An introduction to electrical applications related to environmental control systems in commercial and industrial environments. Topics include: analysis and troubleshooting of control circuits, phase analysis and balancing, interpreting ladder diagrams, identification and testing of system components, and electrical safety.
Prerequisites: ITT 1902.

1913 Electronic Devices for HVACR Systems 1-3-2
An introduction to semiconductor devices utilized in HVACR systems. Topics include: fundamentals of semiconductor theory, circuit analysis, troubleshooting, introduction to programmable logic controllers, and peripheral networks used in conjunction with PLCs.
Prerequisites: ITT 1912.
Corequisites: ITT 1914.

1914 HVAC Control Systems 1 1-3-2
A course on diagnosis and troubleshooting of HVAC controls and systems. Topics include: analysis of industrial/commercial HVACR systems and troubleshooting and maintenance of hydraulic, pneumatic, and electronic/electrical control systems and components.
Prerequisites: ITT 1912.
Corequisites: ITT 1913.

1915 HVAC Control Systems 2 1-3-2
Advanced control components and systems related to larger and more complex HVACR systems. Topics include: automatic, semiautomatic, and hot-gas defrost controls; ice bank and de-ice controls; limit, fan, airflow, and distribution controls; electronic, timer, hydronic, and multi-stage thermostat controls; and computer-based system controllers.
Prerequisites: ITT 1914.

1916 HVACR Systems Analysis and Troubleshooting 1-3-2
A hands-on course on diagnostics and troubleshooting commercial/industrial HVACR systems and related components. Topics include: three phase power systems, relay circuits, compressor and motor faults, air flow and distribution problems, thermostat and sensor malfunctions, corrective actions, and selection and proper use of instrumentation.
Prerequisites: ITT 1914.

1917 Electrical Systems (Physical Plant) 2-0-2
An overview of electrical systems common to commercial/industrial facilities. Topics include: substations and feeder circuits, wiring methods, metering, overcurrent devices, energy consumption, conservation and management, and computer integration for system control and management.
Prerequisites: ITT 1912.

1918 Rotational Machinery 1 (Systems and Controls) 2-0-2
An introduction to DC and AC machinery. Topics include: system operation and diagnostics, component identification (physical and graphic), manual and automatic starters, wiring fundamentals, and instrumentation.
Prerequisites: ITT 1902, ITT 1903.

1919 Rotational Machinery 2 (Systems and Controls) 2-0-2
A continuation of ITT 1918. Topics include: pilot devices (pressure, float, foot, joystick, selector, limit and pushbutton switches), timers, sequencers, jogging, reversing, and across the line starting.
Prerequisites: ITT 1918.

1920 Rotational Machinery 3 (PLCs) 2-0-2
An introduction to programmable logic controllers. Topics include: basic components of the PLC, program scan, addresses, programming functions, binary and binary-coded decimal numbers, analog inputs and outputs, applications and identification of PLCs most commonly used in industry.
Prerequisites: ITT 1919.

1921 Rotational Machinery 4 (Advanced Controls) 2-0-2
Analysis of acceleration and deceleration circuits utilized in industrial and commercial motor circuits. Topics include: starter circuits, solid-state acceleration controls, deceleration and braking methods, plugging and antiplugging circuits, variable speed controls, and reversing circuits.
Prerequisites: ITT 1919.

1922 Rotational Machinery 5 (Advanced PLCs) 2-0-2
Advanced programming functions for medium to large scale programmable logic controller networks. Topics include: programming for timers, counters, sequencers, and mathematical functions; program debugging; and equating programming functions to hard-wired control functions.
Prerequisites: ITT 1920.

1923 Rotational Machinery 6 (PLC Applications) 2-0-2
Practical application of programming and programmable logic controller hardware to typical industry peripherals. Topics include: writing code, interfacing PLC hardware to machine controls, diagnostics, and troubleshooting.
Prerequisites: ITT 1922.

1924 Electrical Safety OSHA (Standard 29 CFR-1910.300-399) 3-0-3
A review of federal regulations relative to electrical safety as outlined by Title 29, Part 1910.300 to 1910.399 of the Code of Federal Regulations Relating to Labor (OSHA).
Prerequisites: None.

1930 Principles of Refrigeration and Air Conditioning 1 3-0-3
An introduction to the basic laws of refrigeration. Topics include: heat and methods of heat transfer, compressors, refrigerants, charging and evacuation of refrigerants, evaporative condensers, heat exchangers, temperature controls, special tools and service equipment, troubleshooting, and basic service procedures.
Prerequisites: ITT 1912.

1931 Principles of Refrigeration and Air Conditioning 2 2-0-2
A continuation of ITT 1930, emphasizing industrial and commercial systems. Topics include: water towers, evaporative and air cooled condensers, water chillers, water treatment, pumps, and roof mount systems.
Prerequisites: ITT 1930.

1932 Practical Sheet Metal Layout 1-3-2
A hands-on course in sheet metal layout and fabrication for HVACR ducting systems. Topics include: safe work practices, hand and stationary tools, measurement, materials, pattern marking, methods of layout for ductwork, curved heel, throat patterns, guards, and ventilators.
Prerequisites: None.
Corequisites: MAT 1171.

1933 Heating Principles 1 (Gas) 1-3-2
An introduction to gas combustion principles and systems. Topics include: natural and liquefied petroleum gas combustion, burners, manifolds, ignition systems, valves, dampers, safety devices, limit switches, thermocouples, heat exchangers, venting, and thermostats as applied to furnace, boiler, and hydronic systems.
Prerequisites: ITT 1912.

1934 Heating Principles 2 (Oil) 1-3-2
Introduction to oil combustion principles and systems. Topics include: atomization and vaporization, high and low pressure gun-type burners, rotary and gear type pumps, ignition systems, primary, stack, sensing and thermostat controls, air flow control dampers, fuel oil grades, and an introduction to resistive and infrared radiant heating.
Prerequisites: ITT 1912.

1935 Psychrometry 1-3-2
A study of air mixtures and their controls. Topics include: specific heat of dry air and its volume, heat of water, heat of vaporization, condensation, specific heat of steam in reference to moisture mixed with dry air, interpretation of psychrometric charts, air flow, venting, filtering, instrumentation, and balancing mixtures.
Prerequisites: ITT 1933.

1936 Principles of Plumbing and Pipefitting 3-0-3
An introduction to the design of piping systems for supply and waste. Topics include: materials, installation, equipment and tooling; and design of waste piping systems for evacuation of water, air, chemicals, and raw sewage.
Prerequisites: MAT 1171.

1937 Piping Distribution Systems 3-0-3
Development of piping systems for gas, water, steam, chemical, and waste. Topics include: materials selection and specifications; cutting; threading; jointing; couplers; reducers; control valves; and calculations for flow rate, pipe size, friction loss, and safe working pressure; preventive maintenance; selection and proper use of tools; and safety procedures.
Prerequisites: MAT 1171.

1938 Boiler Operations 4-0-4
An introductory course in low and high pressure boiler operation. Topics include: methods of construction, terminology, code requirements, methods of fire draft control, water feeding, water treatment, maintenance procedures, and safety.
Prerequisites: None.

1939 Stationary Steam Engineer 1 2-0-2
A preparatory course for the Ohio Steam Engineer's License exam. Topics include: boiler construction and operation, water tube boilers, feed-water regulators, pumps, engines, impulse and reactionary turbines, uni-flow, and slide valves.
Prerequisites: ITT 1938.

1940 Boiler Efficiency 2-0-2
An overview of current methods used to increase the efficiency of boiler operations. Topics include: construction, installation, and retrofit methods used to reduce costs, improve boiler efficiency, and increase safety of boiler operations.
Prerequisites: ITT 1939.

1941 Mechanical Systems (Physical Plant) 2-0-2
An overview of mechanical systems common to commercial/industrial facilities. Topics include: permits, licensing, inspection, certification, sequencing of construction, installation of heating, refrigeration, air conditioning, ducting, air handling, plumbing for new construction, and modification of existing structure.
Prerequisites: ITT 1930, ITT 1933, ITT 1935.

1942 Energy Management 2-0-2
A course in current practices in energy management and conservation in commercial, industrial, and residential physical facilities. Topics include: management of HVACR systems, power and lighting systems, recovery and recycling, and the introduction of computer controls into the energy management system.
Prerequisites: None.

1943 Occupational Safety 2-0-2
An overview of state and federal regulations and standards to provide students with knowledge and skills in accident prevention. Emphasis on OSHA and EPA regulations.
Prerequisites: None.

1944 Valve Maintenance 1-3-2
A course of instruction in valve maintenance, repair, inspection, and installation. Topics include: gate, globe, control, diaphragm, and butterfly valve construction, methods of inspection, disassembly, lapping, reassembly, and installation.
Prerequisites: ITT 1937.

1950 Sheet Metal Fabrication 1 1-3-2
A course in sheet metal layout and fabrication. Topics include: geometric principles, terms, and definitions; elbow, tee(y), and branch layout patterns, developing plane and elevations of round pipe fittings, layout patterns using parallel line methods, pattern labeling, and safe work practices.
Prerequisites: ITT 1932.

1951 Sheet Metal Fabrication 2 1-3-2
A continuation of ITT 1950 Sheet Metal Fabrication 1. Topics include: layout patterns using radial line development and triangulation methods, develop duct run patterns, pattern transfer using scribe lines, generate cut list, brake, shearing, seam, and joint construction.
Prerequisites: ITT 1950.

1952 Precision Sheet Metal Fabrication 1-3-2
A course in sheet metal layout and fabrication where exacting tolerances are required. Topics include: introduction to and use of square combination set, precision steel rule, micrometer, vernier calipers, dividers, and auto center punch precision tools; layout techniques for fabricating precision parts, close tolerance machining methods, fabricating single and multi-piece precision parts, construction of precision assemblies, and inspection.
Prerequisites: ITT 1951.

1970 Introduction to Carpentry 1-3-2
A course in basic carpentry for the facilities operation and maintenance individual. Topics include: selection and proper use of hand and power tools, general repairs, wood and metal stud construction of walls, door and window openings, basic blue print reading, and safety.
Prerequisites: MAT 1171.
Corequisites: ITT 1973.

1971 Intermediate Carpentry 1-3-2
A continuation of course ITT 1970 Introduction to Carpentry with emphasis on rough carpentry. Topics include: building layout, fabrication of concrete forms, roof, floor, exterior wall, and stair framing; interior partitions, ceiling joists, backing, blocking, bases, and steel framing.
Prerequisites: ITT 1970.

1972 Advanced Carpentry 1-3-2
Finish carpentry and engineered materials. Topics include: interior doors and frames, trim, stairs, floors, cabinets, and countertops. Fabrication, milling, and installation of engineered materials (Formica, Corian, Avonite, Wilsonart).
Prerequisites: ITT 1971.

1973 Carpentry Tools and Equipment 3-0-3
A course on hand, portable power and stationary tools common to the fields of carpentry and cabinet making. Hand tools include: layout, cutting, boring, fastening and demolition. Portable power and stationary tools include: circular, radial arm, miter, and table saws; planers, routers, sanders, jointers, setup, and safe operation.
Prerequisites: None.
Corequisites: ITT 1970.

1974 Estimating Methods 2-0-2
A course in projecting costs and eliminating overruns relative to material, equipment, transportation, and labor. Topics include: writing specifications, bid preparation and presentation, basic cost accounting, record keeping, and computer applications.
Prerequisites: None.

1975 Construction Site Preparation 1 2-0-2
A review of practices and procedures for site preparation for new construction. Topics include: building codes, materials, equipment and instrumentation used to prepare the building site.
Prerequisites: None.

1976 Construction Site Preparation 2 2-3-3
A continuation of course ITT 1975 Construction Site Preparation 1 with emphasis on the Level-Transit and its use for preparing the building site. Topics include; Level-Transit nomenclature, setup, and operation, measuring differences in grade elevations, transfering grade elevations, layout of building lines, vernier scale reading, establishing points on a line, and staking out the site.
Prerequisites: ITT 1975.

1978 Safety and Health Regulations for Construction (1926) 3-0-3
A review of federal regulations as outlined by Title 29, Part 1926, Section 1 of The Code of Federal Regulations Relating to Labor (OSHA). All subparts (A-Z) from general interpretations to toxic and hazardous substances will be covered.
Prerequisites: None.

1979 Lead Abatement and Hazard Control 3-0-3
A course in current practices for lead abatement and hazard control techniques. Topics include: proper hazard control strategies and safe work practices for a variety of abatement technologies for interior and exterior dust, paint, and soil. Findings from a series of recent studies will be reviewed for efficacy, applicability, cost, regulatory concerns, dust generation, and hazardous material generation for different abatement techniques.
Prerequisites: None.

1980 Scaffolding and Platforms 2-3-3
This course provides a practical hands-on approach to scaffolding and platform construction. Topics include: light, medium, and heavy duty fabrication of single pole, independent pole, tube and coupler, outrigger, square, horse, bracket, and needle beam scaffolds; ladder type platforms, load requirements, bracing, planking, ledgers, toeboards, guardrails, tie-ins, and anchoring as required by OSHA Regulations (Standards-29 CFR-1910.28).
Prerequisites: ITT 1970, ITT 1973.

1990 Plumbing Codes (State of Ohio) 2-0-2
A study of State Codes as it regulates environmental sanitation for the protection of public health. Topics include: materials, fittings fixtures, installation, and maintenance to provide adequate supplies of potable water and removal of water borne wastes.
Prerequisites: None.

1991 Plumbing Principles 1 1-3-2
An introduction to installation principles and practices. Topics include: water supply, hot water supply, and waste piping for residential and small commercial facilities. Jointing methods of screwed threads, cast iron no-hub, sweat solder, and solvent welding are also covered.
Prerequisites: ITT 1936.
Corequisites: ITT 1990.

1992 Plumbing Principles 2 1-3-2
Installation principles and practices for large commercial and industrial facilities. Topics include: assembly and offset problems, large scale water supply, distribution and waste piping, and further practice in joint applications.
Prerequisites: ITT 1991.

1993 Plumbing Construction Practices 2-3-3
A course to develop fundamental knowledge and skills needed to safely function in plumbing activities on a construction site. Topics include: sizing and code requirements for underground piping, interpretation of construction prints and drawings, rigging for plumbing construction, trenching, shoring practices, and construction safety.
Prerequisites: ITT 1975, ITT 1992.

1994 Water Heating Systems 2-0-2
A course on operation, installation, maintenance, and repair of steam and hot water systems. Topics include: code requirements, pipe sizing, air elimination, circulation pumps, heat converter, and boiler sizing.
Prerequisites: MAT 1172, ITT 1992.

ITT Industrial Trades
LH Landscape Horticulture

1995 Drain, Waste , and Vent Systems 2-3-3
A course in construction of drainage, vent, and sanitary waste disposal systems. Topics include: code requirements, types of drainage systems, sizing drainage systems, allowable materials, grading drainage systems, building drainage, sewer systems, traps, interceptors, ejectors, and sump pumps.
Prerequisites: MAT 1172, ITT 1992.

1996 Gas Piping and Venting 2-3-3
A course in provision of gas supply, distribution, and gas appliance installation. Topics include: code requirements, types of gas, principles of combustion, piping materials, fittings, valves, manifolds, burners, sizing, venting, and safety.
Prerequisites: ITT 1992.

LAW Management

1823 Business Law 1 3-0-3
A course on fundamental principles of business law. Topics include: contracts, negotiable instruments, and agencies.
Prerequisites: None.

1824 Business Law 2 3-0-3
A continuation of LAW 1823. Topics include: government regulations, trust, and insurance.
Prerequisites: LAW 1823.

1825 Hospitality Law 3-0-3
A comprehensive study of fundamental principles of hospitality, hotel, motel, and tourism law concerned with the various public callings. Topics include: the essential laws including federal, state, and administrative laws for making responsible decisions in complex and diverse hospitality operations.
Prerequisites: None.

1827 International Law 3-0-3
A course on the three basic systems of international law. Topics include: the influence of a nation's culture on its legal system, laws involving the rights and duties of states, intergovernmental organizations that affect legal relations between nations, and legal issues that affect foreign travel and international business transactions.
Prerequisites: None.

1828 Family Law 3-0-3
A comprehensive overview of the various areas comprising family law including the laws of marriage, dissolution, and divorce; prenuptial agreements; child custody and visitation; child support and collection; paternity; juvenile law; and adoption. The course focuses on common law concepts and legal procedures.
Prerequisites: LAW 1823.

1829 Litigation 1 3-0-3
A comprehensive study of the procedural aspects of criminal and civil litigation within the U.S. legal system. Topics include: the Federal Rules of Civil and Criminal Procedure, parties to lawsuits, pleadings, and motion practice.
Prerequisites: LAW 1823.

1830 Legal Research 1 3-0-3
An introductory course on legal research. Topics include: an overview of the U.S. legal system; types of law; purposes and uses of research; researching primary and secondary authority; citation procedure and format; research strategies; and computer research including LEXIS, WESTLAW, and CD-ROM. Students must use local law libraries.
Prerequisites: LAW 1823.

1831 Legal Research 2 3-0-3
A continuation of LAW 1830. Topics include: drafting and writing case, trial and appellate briefs; pleadings; internal and external memoranda; motions; discovery documents; persuasive writing. Emphasizes shepardizing and proper citation and formatting.
Prerequisites: LAW 1830.

1832 Litigation 2 3-0-3
A continuation of LAW 1829. Topics include: The Federal Rules of Evidence, discovery, trial, judgements and ADR.
Prerequisites: LAW 1829.

1833 Entertainment Law 3-0-3
The study of business and law of the entertainment industry, including representation of creative talent, business and personality interests, and licensing. Topics include: copyrights, and intellectual property, music publishing, sound recordings, literary publishing, film, and television.
Prerequisites: LAW 1823.

1838 Legal Ethics 3-0-3
An introduction to the codes of ethics that regulate the practice of law, including support staff. Topics include: Code of Professional Responsibility and various paralegal codes. Coursework includes reviewing individual canons and in-depth review of case studies applicable to each.
Prerequisites: None.

1839 Bankruptcy Law 3-0-3
An introduction to federal bankruptcy law and practice. Topics include: state exemptions and state Uniform Commercial Code applications, bankruptcy and accompanying petitions, exemptions, the automatic stay, and creditor distinctions. Students draft petitions and review case studies to gain practical application skills.
Prerequisites: None.

LBR Labor Relations

1535 Introduction to Labor/Management Relations 3-0-3
A course providing a general overview of the historical, legal, and current status of labor/management relations in union and non-union environments in the public and private sectors. Topics include: labor economics, labor law, labor movements, and the concept of relative bargaining power.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1537 Negotiation and Dispute Resolution 3-0-3
A course on the theory and practice of negotiations. Topics include: personal and business negotiations, collective bargaining, bargaining power, strategies and tactics, impasse procedures, third party neutrals, private and public sector legal structures and considerations. Students participate in a bargaining simulation.
Prerequisites: LBR 1535 or equivalent.

1538 Case Studies in Labor Relations 3-0-3
A course on employee and labor relations. Topics include: application of labor laws, grievance, arbitration, and alternative dispute resolution.
Prerequisites: LBR 1535 or equivalent.

1539 Introduction to Employment and Workplace Law 1 3-0-3
A course on the major federal legislation regarding employment rights and responsibilities from the viewpoints of the manager and the employee. Topics include: public policy regarding hiring, EEO, ADA, FMLA, sexual harassment, and developing legal trends.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1540 Introduction to Employment and Workplace Law 2 3-0-3
A continuation of LBR 1539. Topics include: major legislation regarding the Fair Labor Standards Act, safety, workers' compensation, age discrimination, unemployment compensation, and developing trends in employment law.
Prerequisites: LBR 1539 or instructor consent.

LH Landscape Horticulture

3500 Horticulture Orientation 1-1-1
An introduction to the various horticulture occupations. Topics include: horticulture preparedness, best practices, and standards of professionalism.
Prerequisites: None.

3501 Soils and Plant Nutrition 3-2-4
A course on the formation and physical, chemical, and biological properties of soils that affect plant growth.
Prerequisites: None.

3502 Horticulture Science 2-2-3
A course on plant classification, structures, physiology, and development, and the environmental conditions that affect plant growth.
Prerequisites: None.

3504 Woody Plant Materials 1 2-3-3
The study of woody plants primarily grown by nurseries and found in the landscape and secondarily found in naturalized settings of Ohio. Topics include: deciduous and evergreen trees, shrubs, and vines with emphasis on identifying features, culture, and landscape use. Weekly plant walk field trips are required.
Prerequisites: None.

3505 Introduction to Herbaceous Plant Materials 2-2-3
A course on the classification, identification, and general cultural requirements of annuals, perennials, bulbs, and roses commonly used in garden plantings. Topics include: researching theme gardens and basic bed design. Field trip required.
Prerequisites: None.

3506 Nursery Management 1 2-2-3
A course on the techniques and practices used in the commercial production of field or containerized landscape plants, nursery business management, organization, culture, irrigation, and pruning. Field trips required.
Prerequisites: LH 3501, LH 3502.

3507 Arboriculture 2-3-3
A course on the commercial arboriculture business. Topics include: the diagnosis and treatment of tree ills, principles and techniques used to protect trees from disease and damage, pruning, removal, and climbing safety. Field activities required.
Prerequisites: LH 3502.

3508 Turfgrass Management 2-2-3
A course on turfgrass management principles and practices of identification. Topics include: growth, uses, establishment, and pest control of turfgrass areas. Field trips required.
Prerequisites: None.

3509 Landscape Design 1 2-3-3
A course in landscape development for residential sites. Topics include: the design process, graphics, and lettering. Students must provide drawing tools. Field trips required.
Prerequisites: None.

3510 Small Engine Maintenance & Repair 2-2-3
A study of the operation and maintenance of small gasoline engines with emphasis on safety and troubleshooting.
Prerequisites: None.

3511 Introduction to Landscape Construction 2-3-3
A course on selecting and working with materials such as wood, stone, concrete, brick, and interlocking pavers used in landscape feature construction. Topics include: measuring, site layout, grading, drainage, and erosion control and hand and power tool use. Field trips required.
Prerequisites: LH 3509.

3513 Advanced Landscape Construction 2-3-3
A course on advanced techniques of landscape construction. Topics include: constructing decks, patios, walkways, retaining walls, steps, and water features. Field trips required.
Prerequisites: LH 3511.

3515 Woody Plant Materials 2 2-3-3
A course on woody plants grown by nurseries and used in the landscape. Topics include: novel plants found in arboreta; plants in naturalized settings in Ohio; and deciduous and evergreen trees, shrubs, and vines with emphasis on identifying features, culture, and landscape use. Weekly plant walk field trips required.
Prerequisites: LH 3504.

3516 Herbaceous Plants 2 2-2-3
A course on the design, long-term establishment, selection, maintenance, and propagation of herbaceous plants. Prior gardening experience is recommended before taking this course. Field trips required.
Prerequisites: LH 3505, LH 3509.

3517 Computer Aided Landscaping Drafting 2-3-3
An introductory course on the use of computers in landscape design. Topics include: the techniques of generating plot plans, planting plans, and presentation drawings used in landscape contracting.
Prerequisites: LH 3509.

3518 Landscape Design 2 2-3-3
A continuation LH 3509, with progressively more difficult problems. Topics include: basic details of landscape architectural construction grading, construction, drainage, and irrigation factors.
Prerequisites: LH 3509.

3519 Landscape Contracts and Specifications 3-0-3
A study of planting design and plan presentation. Topics include: cost estimates, procedures, specifications, and types of contracts. Students examine typical plantings in the field.
Prerequisites: LH 3511.

3520 Horticulture Lab 0-3-1
Supervised practical experience carried out in a structured environment. Topics include: installation and maintenance of landscape plantings and operation of equipment and vehicles common to the industry. Field trips required.
Prerequisites: None.

3523 Horticulture Entomology 2-2-3
A course on principles and practices in diagnosing and controlling insect pests on various horticultural crops and integrated pest management principles. Field trips required.
Prerequisites: LH 3502, LH 3504.

3524 Plant Pathology 2-2-3
A course on principles and practices in diagnosing, preventing, and controlling plant diseases on various horticulture crops. Field trips required.
Prerequisites: LH 3502, LH 3504.

3525 Principles of Plant Propagation 2-2-3
A study of the commercial sexual and asexual propagation techniques of woody and herbaceous plants. Topics include: principles and techniques to propagate common plants through seed, cuttings, and grafting. Lab activities and field trips required.
Prerequisites: LH 3502.

3526 Introduction to Golf and Turf Management 1-1-1
A course on facility requirements; rules of major sports; organization, staffing, resource management, and the special needs and concerns of golf courses, athletic facilities, and lawn care operators. Field trips required.
Prerequisites: None.

3529 Landscape Grading, Drainage and Surveying 2-3-3
An introductory course in site preparation. Topics include: site assessment, establishing grades, soil conservation and improvement, surface and sub-surface drain systems, cut and fill calculations, legal issues, and equipment operation and safety. Field trips required.
Prerequisites: MAT 1161.

3532 Landscape Management 2-3-3
A course on principles and practices involved in maintaining ornamental plants. Topics include: planting, fertilizing, pruning, pest control, and other related maintenance practices. Field projects required.
Prerequisites: LH 3502, LH 3508.

3533 Principles of Irrigation 2-2-3
A study of irrigation theory, design, and cost estimation for residential and light commercial irrigation systems.
Prerequisites: None.

3534 Interior Plantscaping 2-2-3
A course on identification, culture, and maintenance of tropical plants used in residential and commercial interior plantings. Field trips required.
Prerequisites: None.

3535 Woody Plant Materials 3 2-3-3
A course on plants commercially available and widely used in the landscape and nursery industry, cultivar distinctions, and landscape use. Field trips required.
Prerequisites: LH 3504, LH 3515.

3537 Turfgrass Pests 2-2-3
A course on insects, diseases, weeds, and other pests that affect turf grasses. Topics include: diagnosing and managing these problems. Field trips required.
Prerequisites: LH 3508.

3539 Landscape Design 3 2-3-3
A continuation of LH 3518. Topics include: applying design theory; landform design; using water in garden design; advanced graphic skills including section, elevation, isometric, and perspective techniques; and computer applications in design. Course projects emphasize client contact and sales presentation skills.
Prerequisites: LH 3518.

3540 Introduction to Floral Design 2-2-3
A basic course on principles of making simple flower arrangements and corsages. Topics include: types of design, style, principal tools, equipment, materials, foliage, and flower types.
Prerequisites: None.

3544 Advanced Floral Design 2-2-3
A continuation of LH 3540. Topics include: complex designs such as wedding, hospital, church, and funeral work.
Prerequisites: LH 3540.

LH Landscape Horticulture
LIT Literature

3546 Computer Aided Landscape Drafting 2 2-3-3
A continuation of LH 3517. Topics include: advanced skills in plot plans, planting plans, and presentation drawings.
Prerequisites: LH 3517.

3547 Photo Imaging for Landscape Design 2-3-3
An introductory course on computer use in developing photo/realistic images of proposed landscape designs. Topics include: techniques such as scanning, scaling, color selection, and image editing.
Prerequisites: None.

3549 Pesticide Safety and Application 2-2-3
Students study the uses and applications of horticultural chemicals, including insecticides, herbicides, fungicides, and other products. Emphasis is placed on safety and proper selection of chemicals. Students take the Ohio Department of Agriculture Pesticide Applicator License exams as part of the course.
Prerequisites: None.

3550 Golf Course Management 2-3-3
A course on developing and managing modern golf courses. Topics include: layout and construction, course management systems, maintenance, budgeting, and record keeping.
Prerequisites: LH 3508, LH 3556 or program chair consent.

3552 Installation and Maintenance of Irrigation Systems 2-2-3
A practical course for the study of installation and maintenance of residential and light commercial irrigation systems. Active participation and classroom exercises help students learn commonly accepted methods of installation and troubleshooting. Field trips may be required.
Prerequisites: LH 3533 or program chair consent.

3554 Athletic Field Management 2-2-3
An in-depth study of athletic field management for school, municipal, and professional sports operations. Topics include: turfgrass selection, cultural practices for turf growth enhancement, practices for playability enhancement, field setup, existing field renovation.
Prerequisites: LH 3501, LH 3508 or program chair consent.

3556 Advanced Turfgrass Management 2-2-3
An advanced course on practices and culture of turfgrass management presented from a practical application perspective. Students learn how to develop turfgrass programs and budget for business success in the green industry. Research project and field trips required.
Prerequisites: LH 3501, LH 3508.

3560 Plants for Sustainable Landscapes 2-3-3
A course on identification, culture, and uses of nursery-grown woody and herbaceous plants in tri-state sustainable landscapes. Topics include: using native species where appropriate and controlling invasive species. Weekly field trips required.
Prerequisites: LH 3504, LH 3505 or instructor consent.

3561 Landscape Solutions to Stormwater Management 2-2-3
A course on practical applications of landscapes to address storm water and runoff management. Topics include: the ecology, design, installation, and maintenance of bioswales, green roofs, rain gardens, and other rain water retention systems. Field trips required.
Prerequisites: LH 3501, LH 3502, LH 3509 or instructor consent.

3562 Energy Use in Modern Landscapes 2-2-3
A course on practical applications of emerging technologies for traditional and alternative energies, as applied to landscapes in the tri-state region. Topics include: design, specification, installation, and maintenance of energy technology systems. Field trips required.
Prerequisites: LH 3511 or instructor consent.

3563 Technologies in Landscape Sustainability 2-2-3
A course on new styles of landscape technologies. Topics include: design and management techniques for advanced technology-based and sustainable landscapes, such as green roofs, and rain gardens. Field trips required.
Prerequisites: LH 3509, LH 3532 or instructor consent.

3564 Horticulture Implications Climate Change 1-2-2
A course on the interaction of climate and landscapes. Topics include: adapting new and existing landscapes to changing climate patterns and moderating effects of climate change. Field trips required.
Prerequisites: LH 3502, LH 3504 and LH 3505, or instructor consent.

3565 Sustainable Landscape Design 1-2-2
A course on elements of sustainability associated with landscape design. Topics include: site choice, stormwater controls, xeriscaping, the landscape designer's role in restoring and protecting habitats, and other site-related criteria that pertain to LEED and other certifications.
Prerequisites: LH 3562 and LH 3563 or instructor consent.

3570 Introduction to Urban Agriculture 2-3-3
A course on the practices of cultivating, processing, and distributing food in an urban area. Topics include: growing food within the urban landscape, the politics and history of urban agriculture, and urban farm design. Field trips required.
Prerequisites: ENG 1001.

3599 Special Topics in Landscape Horticulture Var-Var-Var
Individual study and projects pertaining to Landscape Horticulture topics. Open to students by special arrangement with the program chair and the dean/designee of the Business Technologies Division.
Prerequisites: None.

9225 Cooperative Education
Landscape Horticulture/Turf Management 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the LH program, 2.0 minimum GPA.

9245 Cooperative Education Landscape Horticulture - Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the LH program, 2.0 minimum GPA.

LIT Literature

1040 Survey of American Literature to 1860 3-0-3
Chronological survey of American authors from the colonial period to the beginning of the Civil War. Topics include: the major historical and cultural issues of their times.
Prerequisites: Nine credits of English composition.

1041 Survey of American Literature, 1860 to 1914 3-0-3
A course on American authors from the Civil War era to the period before World War I emphasizing developments and changes in American culture.
Prerequisites: Nine credits of English composition.

1042 Survey of American Literature after 1914 3-0-3
A course on notable American authors since World War I including discussion of major cultural and social developments.
Prerequisites: Nine credits of English composition.

1045 Survey of British Literature before 1500 3-0-3
A chronological survey of major works of English literature from the Anglo-Saxon period to 1550.
Prerequisites: Nine credits of English composition.

1046 Survey of Renaissance and 18th Century British Literature 3-0-3
A survey of major British authors from the Renaissance through the 18th century.
Prerequisites: Nine credits of English composition.

1047 Survey of 19th and 20th Century British Literature 3-0-3
A survey of major British authors and literary movements in the 19th and 20th centuries.
Prerequisites: Nine credits of English composition.

1048 Introduction to Shakespeare 3-0-3
Students read three to five of Shakespeare's best-known plays and view one or more video versions of those plays. Course emphasizes the issues facing modern interpreters of these classic plays. Regular written assignments and out of class screenings required.
Prerequisites: Nine credits of English composition or other writing classes.

1050 The Short Story 3-0-3
An introduction to short fiction with examples from a variety of periods, styles, and cultures. Emphasizes critical reading and involves regular written assignments.
Prerequisites: Nine credits of English composition.

1051 Drama 3-0-3
An introduction to drama as a literary form including plays that represent a variety of periods and styles. Regular written assignments and out of class screenings required.
Prerequisites: Nine credits of English composition.

1052 Poetry 3-0-3
An introduction to poetry as a literary form. The poems represent a variety of periods, styles, and cultures. The course involves regular written assignments.
Prerequisites: Nine credits of English composition.

1053 The Novel 3-0-3
An introduction to major themes and issues in the novel with examples from a variety of periods and cultures. Content and emphasis vary from term to term. Regular written assignments required.
Prerequisites: Nine credits of English composition.

1054 Children's Literature 3-0-3
An introduction to themes and issues in multicultural children's literature, including poetry and prose. Emphasizes critical assessment of materials in relation to the interests and needs of varied age groups. Regular written assignments required.
Prerequisites: Nine credits of English composition or instructor consent.

1055 Science Fiction 3-0-3
An introduction to themes and issues in science fiction, emphasizing the stories' analysis of social and technological trends. Regular written assignments required.
Prerequisites: Nine credits of English composition.

1056 Women Writers 3-0-3
An introduction to major themes and forms in women's writing from a variety of periods and cultures including American ethnic women. Content and emphasis vary from term to term. Regular written assignments required.
Prerequisites: Nine credits of English composition.

1057 Survey of African-American Writers 3-0-3
An introduction to major themes and forms in African-American writing from a variety of periods, including contemporary writers. May also include African or Afro-Caribbean writers. Content and emphasis vary from term to term. Regular written assignments required.
Prerequisites: Nine credits of English composition.

1058 Introduction to Literature 3-0-3
An introduction to strategies for interpreting literature. Topics include: literary theory and a variety of interpretative approaches.
Prerequisites: Nine hours of English composition.

1059 Topics in Literature 3-0-3
Study and discussion of selected topics or genres in literature (detective fiction, images of women, etc). Content and emphasis vary from term to term.
Prerequisites: Nine credits of English composition.

1060 African-American Writers, 1619 to 1865 3-0-3
A chronological introduction to major themes and forms in African-American writing from 1619 to 1865. May also include African or Afro-Caribbean writers. Regular written assignments required.
Prerequisites: Nine credits of English composition.

1061 African-American Writers, 1865 to present 3-0-3
A chronological introduction to major themes and forms in African-American writing from 1865 to present. May also include African or Afro-Caribbean writers. Regular written assignments required.
Prerequisites: Nine credits of English composition.

LOT Laser Electro-Optics

6710 Introduction to Lasers 2-3-3
An introduction to laser fundamentals. Topics include: emission and absorption of photons, elements of the laser, properties of laser light, optical cavities, helium-neon lasers, laser classifications and characteristics, and an introduction to laser safety.
Prerequisites: None.
Corequisites: MAT 1172 or MAT 1191.

6715 Laser Safety 2-2-3
An introduction to safe laser use. Topics include: parts of the eye most susceptible to damage from laser light; point sources and extended sources; specular, diffuse, and Fresnel reflections; hazards of laser beams; laser classification; bioeffects; associated hazards and calculations of MPE, OD, and nominal hazard zone.
Prerequisites: LOT 6710.

6720 Geometrical and Wave Optics 3-3-4
A course on the basics of geometrical and wave optics. Topics include: reflection and refraction of light, mirrors, lenses and prisms; reflection; interference; diffraction; and polarization.
Prerequisites: MAT 1172 or MAT 1191, LOT 6710.

6730 Optical Components and Devices 3-3-4
An introduction to optical components and devices. Topics include: optical components such as optical windows, flats, filters, and beamsplitters and laser-optic devices such as photodetectors, laser power and energy detectors, collimators, autocollimators, beam expanders, spatial filters, electro-optic Q-switches, and laser modulators.
Prerequisites: LOT 6720.

6735 Industrial Laser Systems 3-3-4
A course on various types of industrial laser systems. Topics include: types of lasers such as Nd: YAG, CO2, Excimer, Argon, and Semiconductor; motion control systems; and beam delivery systems.
Prerequisites: None.
Corequisites: LOT 6730.

6736 Medical Laser Systems 3-3-4
A course on various types of medical laser systems. Topics include: various types of medical lasers such as Nd: YAG, CO2, Excimer, dye, and argon used in medical applications; beam delivery systems; and filters, tips, and other accessories.
Prerequisites: LOT 6730.

6740 Applications of Lasers 3-3-4
An introduction to laser materials processing. Topics include: cutting, drilling, welding, engraving, surface modification, and holography.
Prerequisites: LOT 6730.

6741 Introduction to Fiber Optics 3-3-4
A course on optics review-lenses, imaging, numerical aperture, diffraction, light wave fundamentals dispersion, pulse distortion, reflection at a plane boundary, critical-angle reflections, wave guides, modes in symmetric slab wave guide, step index fiber, graded index fiber, modes in step-index fiber, distortion in step-index fiber, couplers and connectors, lateral misalignment, angular misalignment, end separations, and splices.
Prerequisites: LOT 6710.

6745 Optical System Design 3-3-4
An introduction to the design of optical systems. Topics include: co-axial system of two thin lenses, thick lenses, cardinal points, refraction matrix, translation matrix, lens matrix, system matrix of two thin lenses, system matrix of combination of lenses, Gaussian constants and their physical significance, and lens aberrations.
Prerequisites: LOT 6720.

6749 Laser Electro-Optic Project 0-4-2
Individual study and special projects pertaining to laser technology. The study may deal with an idea or concept not usually covered by existing courses at the College, or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth-term students by special arrangement with the instructor and program chair. Students receive grades of S or U for this course.
Prerequisites: LOT 6720, EET 7730.

6750 Laser Electro-Optic Measurements 3-3-4
An introduction to different types of spectrometers and interferometers. Topics include: laser power and energy measurements, wavelength, dispersion and refractive index measurements, using monochromators and spectrophotometers, using Fabry-Perot Michaelson, and laser cavity.
Prerequisites: LOT 6740.

6758 Laser Electronics 2-3-3
An introduction to theory, operation, and construction of various types of power supplies that energize lasers. Topics include: safety considerations, supplies needed for different types of lasers, and physical configuration of actual supplies.
Prerequisites: EET 7720.

LOT Laser Electro-Optics
MAT Mathematics

6768 Laser Maintenance 2-3-3
Topics include: the use of support and test equipment; schematic reading, cleaning, and alignment of optical systems; and the maintenance of optical, electronics, and cooling systems of the laser.
Prerequisites: LOT 6758.

6799 Special Problems Seminar - Lasers Var-Var-Var
Individual and independent study and special projects pertaining to the particular program in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair. Students receive grades of S or U for this course.
Prerequisites: LOT 6720, EET 7730.

MA Medical Assisting

4200 Medical Office Practice 3-0-3
Topics include: fundamentals of patient reception, appointment making, mail handling, telephone techniques, inventory procedures, care of equipment and supplies, medical-legal relationships of the medical office, and the assistant's role.
Prerequisites: MCH 4002 (minimum grade C).

4201 Medical Office Practice Lab 0-3-1
Laboratory practice and simulations designed to model the administrative duties of the medical office assistant.
Prerequisites: MA 4200 (minimum grade C).

4202 Clinical Procedures 1 2-3-3
Topics include: asepsis and infection control, fundamentals of patient preparation, history taking, positioning, draping, taking and recording vital signs, assisting the physician with examinations, and caring for the examination room before and after patients.
Prerequisites: Admitted to the MA program, program chair consent.

4203 Clinical Procedures 2 2-3-4
Topics include: medications, sterile procedures, assisting in minor office surgeries, assisting in OB/GYN and special examinations, electrocardiography, X-ray procedures, ultrasound, CT scans, MRIs, radionuclides, and pulmonary function testing.
Prerequisites: MA 4202 (minimum grade C).

4204 Medical Laboratory Procedures 1 2-3-3
Topics include: the use of basic laboratory equipment, quality assurance and quality control, specimen collection, hematology, and serology procedures.
Prerequisites: BIO 4073 or high school biology and CHE 2203 or CHE 2200 or CHE 2231 or high school chemistry (minimum grade C for all).

4205 Medical Laboratory Procedures 2 2-3-3
A continuation of MA 4204. Topics include: physical and chemical microscopic urinalysis; chemistry procedures including blood glucose and cholesterol; microbiology including common parasites; and injection techniques including intramuscular, intradermal, and subcutaneous.
Prerequisites: MA 4204, BIO 4074 (minimum grade C).

4206 Office Diagnostic & Treatment Procedures for Medical Assistants 1 2-3-3
A study of the relationship between diagnostic and therapeutic procedures and patient conditions. Topics include: infectious diseases, circulatory diseases, diseases and conditions that require X-rays for diagnosis, and therapy and respiratory conditions and diseases.
Prerequisites: MA 4205 (minimum grade C).

4207 Office Diagnostic & Treatment Procedures for Medical Assistants 2 2-3-3
Special diagnostic procedures and techniques related to the patient in the physician's office. Topics include: the diagnosis and treatment of patients with urinary tract problems, reproductive system problems, nervous system disorders, endocrine, and other disorders.
Prerequisites: MA 4206 (minimum grade C).

4209 Medical Assistant Seminar 2-0-2
Review of the theory and practice of skills the entry-level medical assistant needs. Topics include: job readiness skills, resume preparation, job search, interviewing, and preparing for National Certification Exam.
Prerequisites: MA 4205, MA 4221, MA 4220 (minimum grade C).
Corequisites: MA 4211.

4210 Medical Office Insurance and Coding 3-0-3
A course on principles of insurance and filing insurance claims. Topics include: using superbills; coding of claims using CPT, ICD-9-CM, and HCPCS; and electronic claims filing in managed care environments and ambulatory care settings.
Prerequisites: MCH 4806 (minimum grade C).

4211 Medical Assisting Externship 1 1-20-4
Clinical practice in medical assisting in physician offices, health centers, clinics, and hospital outpatient departments. Students spend an equal number of hours in clinical and administrative assisting. Students receive no remuneration for these experiences.
Prerequisites: MA 4205, MA 4203 (minimum grade C).
Corequisites: MA 4209.

4213 MA Clinical Experience 1-16-3
Clinical practice in medical assisting in physician offices, health centers, clinics, and hospital outpatient departments. Students spend an equal number of hours in clinical and administrative assisting. Students receive no remuneration for these experiences.
Prerequisites: Successful completion of first year of MA program.

4215 Medical Assisting Clinical Applications 2-3-3
Topics include: trends in managed care, ambulatory care and health care in general. Students present on topics in MA professional practice and operate an on-site health clinic providing testing and patient education services.
Prerequisites: MA 4207, MA 4224 (minimum grade C for both).

4220 Pharmacology for Medical Assistants 3-0-3
An introduction to clinical drug therapy, categories, and adverse reactions. Topics include: drug therapy, drug interactions and principles, terminology, modes of administration, and mechanisms of action of the major drug groups.
Prerequisites: BIO 4073, BIO 4074 (minimum grade C).

4221 Medical Administrative Procedures 2-3-4
Topics include: fundamentals of patient reception, appointment making, mail handling, telephone techniques, inventory procedures, care of equipment and supplies, the assistant's role, and automated patient records.
Prerequisites: MCH 4806, MA 4210 (minimum grade C).

4224 Advanced Clinical Procedure 2-3-3
Topics include: specialties and special patient concerns and geriatrics, pediatrics, ophthalmology, orthopedics, and ENT.
Prerequisites: MA 4203 (minimum grade C).

4245 Medical Office Billing and Reimbursement 3-0-3
A course on principles of bookkeeping and billing for medical office and managed care settings. Topics include: collection theories and techniques, systems used for reimbursement practices, collection ratios and percentages, double entry, and pegboard procedures.
Prerequisites: MA 4210 (minimum grade C).

4298 Special Studies - Medical Assisting Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

9387 Introduction to Medical Assisting Service Learning 1-1-1
A course that gives an overview of community service organizations and agencies. Provides students with a sampling of possible service activities and assists with portfolio development and activity selection.
Prerequisites: Completion of the MA certificate program.

9388 Medical Assisting Service Learning Project 0-3-1
A continuation of MA 9387 in which students complete a selected service project through a community agency. A minimum of 30 service hours is required and may be completed over three terms.
Prerequisites: MA 9387 (minimum grade C).

MAT Mathematics

1105 Science Mathematics 3-2-4
An applied mathematics course incorporating laboratory experiences. Topics include: problem solving; algebraic manipulation of formulas; metric system; significant figures; graphing; ratio, proportion, and unit conversions; percents; estimation; measurement; data collection; and an introduction to statistics.
Prerequisites: DE 0024 or appropriate placement test score.

1108 Math for Food Service 1-2-2
A course on applied mathematical concepts and computations used in the food service industry. Topics include: recipe conversion, portion costing, costs as a percentage of sales, periodic food costs, selling price determinations, and weights and measures. Includes a lab component.
Prerequisites: DE 0024 or appropriate placement test score.

1111 Statistics 1 2-2-3
An introduction to the quantitative techniques of statistics, emphasizing applications. Topics include: the scientific method and purpose of statistics, descriptive statistics, organizing and picturing data, correlation and regression, probability, and normal distributions. Students must have a scientific calculator with STAT capabilities.
Prerequisites: MAT 1124, MAT 1151, MAT 1171, or MAT 1191 (minimum grade C) or appropriate placement test score.

1112 Statistics 2 2-2-3
A continuation of MAT 1111. Topics include: probability distributions, the binomial distribution, sampling distributions and the Central Limit Theorem, point estimates and confidence intervals, and hypothesis testing of proportions and means. Includes two-sample inference. Students must have a scientific calculator with STAT capabilities.
Prerequisites: MAT 1111 (minimum grade C).

1113 Statistics 3 2-2-3
A continuation of MAT 1112. Topics include: chi-square tests, one-way analysis of variance, multiple regression, and nonparametric methods. Course includes a group project. Students must have a calculator with STAT capabilities.
Prerequisites: MAT 1112 or MAT 1179 (minimum grade C).

1121 Business Mathematics 1 3-0-3
A course on the applications of mathematics in the business world. Topics include: arithmetic review, equations, ratios, review of percents, payroll, taxes, and insurance. Students must have a scientific calculator.
Prerequisites: DE 0024 or appropriate placement test mathematics score.

1122 Business Mathematics 2 3-0-3
A continuation of MAT 1121. Topics include: trade and cash discounts, markups and markdowns, inventory, depreciation, financial reports, graphs, statistics, distribution of profit, and overhead. Students must have a scientific calculator.
Prerequisites: MAT 1121 (minimum grade C).

1123 Business Mathematics 3 3-0-3
A continuation of MAT 1122, emphasizing financial math. Topics include: simple interest, bank discounts, compound interest, multiple payment plans, annuities, amortizations, stocks, and bonds. Students must have a scientific calculator.
Prerequisites: MAT 1122 (minimum grade C).

1128 Business Calculus 5-0-5
A foundation calculus course. Topics include: library of functions, derivatives, shortcuts to differentiation, using derivatives, and an introduction to integration. Students must have a graphing calculator.
Prerequisites: MAT 1152 or MAT 1192 (minimum grade C) or appropriate placement test score.

1151 Intermediate Algebra 3-2-4
The study of intermediate algebra emphasizing word problems and real world applications. Topics include: percent applications; roots and exponents; factoring; linear, quadratic, absolute value, and simultaneous equations; inequalities; and an introduction to functions. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: DE 0025 or appropriate placement test mathematics score.

1152 Pre-Calculus 1 5-0-5
A continuation of MAT 1151. Topics include: review of functions and function properties; comparing linear and nonlinear functions including polynomial, exponential, logarithmic, and periodic; and transforming functions. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: MAT 1124 or MAT 1151 or MAT 1191, or both MAT 1171 and MAT 1172 (minimum grade C for all) or appropriate placement test mathematics score.

1153 Pre-Calculus 2 5-0-5
A continuation of MAT 1152. Topics include: the trigonometric functions, inverse trigonometric functions, trigonometric identities, solutions of trigonometric equations, right and oblique triangles, vectors, polar coordinates, and complex numbers. Students must have a graphing calculator.
Prerequisites: MAT 1152 (minimum grade C) or appropriate placement test score.

1154 Calculus 1 5-0-5
A foundation calculus course. Topics include: library of functions, derivatives, shortcuts to differentiation, using derivatives, and an introduction to integration. Students must have a graphing calculator.
Prerequisites: MAT 1153 or MAT 1192 (minimum grade C) or appropriate placement test score.

1155 Calculus 2 5-0-5
A continuation of MAT 1154. Topics include: methods of integration (substitution, parts, tables, numerical, and CAS), solutions to differential equations, Euler's method, separation of variables, and Taylor Series. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: MAT 1154 (minimum grade C).

1156 Calculus 3 5-0-5
A continuation of MAT 1155. Topics include: functions of more than two variables; limits, continuity, and differentiation of functions of more than two variables; vectors (dot and cross products); partial derivatives; and local and global extrema. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: MAT 1155 (minimum grade C).

1161 Applied Algebra 3-2-4
A course on the practical uses of mathematics in engineering and basic science applications. Topics include: review of percents and fractions, manipulating measured values and variables in formulas, and reading numbers from technical drawings and from measuring devices, solving linear equations and applications. Students must have a scientific calculator.
Prerequisites: DE 0020 (minimum grade B) or appropriate placement test score.

1162 Applied Geometry & Trigonometry 3-2-4
A course on the practical uses of geometry and trigonometry. Topics include: manipulating formulas, using geometric facts, the relationship between geometry and trigonometry, constructing and reading graphs, quadratic equations and 2x2 systems, and reading numbers from technical drawings and from measuring devices. Students must have scientific calculator.
Prerequisites: MAT 1161 (minimum grade C).

1171 Technical Mathematics 1 4-0-4
A course that strengthens algebraic, geometric, and trigonometric skills with practical applications. Topics include: order of calculation, scientific notation, accuracy, rounding, unit conversion, formula and equation manipulation, ratio and proportion, area and volume calculation, right triangle trigonometry, variation, graphs, and simultaneous equations. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: MAT 1162 (minimum grade C) or appropriate placement test score.

1172 Technical Mathematics 2 4-0-4
A continuation of MAT 1171. Topics include: quadratic equations, equations involving fractions, oblique triangle trigonometry, vector addition, and solving exponential equations and equations using angles in radians. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: MAT 1171 (minimum grade C).

1173 Algebra & Trigonometry 2 with Statistics 4-0-4
A continuation of MAT 1172. Topics include: functions, solving exponential and logarithmic equations; complex numbers; graphs of basic trigonometric functions; solving trigonometric equations, second degree simultaneous equations, and radical equations; and introduction to statistics. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: MAT 1191 or MAT 1172 (minimum grade C).

1191 Algebra and Trigonometry 1 3-2-4
A course that strengthens algebraic, geometric, and trigonometric skills with practical applications. Topics include: scientific calculations, unit conversions, variations, geometry review, solving algebraic formulas, graphing, right triangle and oblique triangle trigonometry, vector addition, quadratic equations, and simultaneous equations. Students must have a graphing calculator; TI-83 or TI-84 preferred.
Prerequisites: MAT 1161 and MAT 1162 (minimum grade A) or appropriate placement test mathematics score.

MAT Mathematics
MCH Multi-Competent Health Technology

1192 Algebra and Trigonometry 2 3-2-4
A continuation of MAT 1191. Topics include: functions and function notation; transformations, compositions, and inverses of functions; integer and fractional exponents; exponential and logarithmic functions; sinusoidal functions and their graphs; complex numbers; solving systems of second degree equations; radical equations; and trigonometric equations. Students must have a graphing calculator.
Prerequisites: MAT 1191 or MAT 1172 (minimum grade C) or appropriate placement test score.

1193 Technical Calculus 4-0-4
A traditional approach to calculus. Topics include: slope and rate of change, limits, derivative concept, techniques for calculating derivatives, indefinite and definite integrals. Derivative applications include curve sketching, related rates, optimization, and motion. Integral applications include areas, volumes of revolution, and related topics. Students must have a graphing calculator.
Prerequisites: MAT 1173 or MAT 1192 (minimum grade C) or appropriate placement test score.

1198 Workshops in Mathematics Var-Var-Var
Study of selected topics in mathematics designed to meet current needs. Content and emphasis vary from year to year.
Prerequisites: None.

1199 Special Studies-Mathematics Var-Var-Var
A personal academic pursuit related to the student's technical field of study mutually agreed upon by the student and supervising faculty member. The Dean of Humanities and Sciences must approve the plan of study prior to registration. Students receive grades of S or U for this course.
Prerequisites: None.

MCH Multi-Competent Health Technology

4001 Introduction to the Health Care System 2-0-2
An overview of the health care system. Topics include: history, organization, areas of specialization, roles and relationships, education, medical ethics, and patient rights.
Prerequisites: None.

4002 Informatics in Health Care 1-2-2
A course on information technology in health care delivery systems including hardware, software, Internet, and database use.
Prerequisites: OT 3007 (minimum grade C) or keyboarding skill at 20 words per minute.

4803 Medication Aide 7-6-9
A course on basic concepts of anatomy, physiology, and pharmacology as required by State of Ohio regulations. The course includes a minimum of 80 hours of lecture and lab practice and 40 hours of clinical to prepare students to distribute medications in long-term care and residential care facilities.
Prerequisites: Must be on the State of Ohio Registry or have one year of experience in a residential care setting. Must have HS diploma or GED, current health record, DE 0020, DE 0011 or appropriate placement test score.

4805 Patient Care Skills 1-3-2
A course on basic health care concepts and skills for students planning a career in health care. Topics include: basic body mechanics, caregiver/client relationships, infection control, basic assessment skills, team building skills, and problem solving techniques.
Prerequisites: None.

4806 Medical Terminology 1 3-0-3
A systematic study of the basic structure of medical words. Topics include: prefixes, suffixes, word roots, combining forms, and singulars and plurals.
Prerequisites: None.

4807 Medical Terminology 2 3-0-3
A systematic study of medical terminology and abbreviations associated with body organization, body systems, oncology, radiology, nuclear medicine, pharmacology, and other medical specialties. Topics include: defining, pronouncing, and spelling medical terms using prefixes, suffixes, roots, and combining forms.
Prerequisites: MCH 4806 (minimum grade C).

4808 Professionalism in Health Care 3-0-3
This course surveys the professional standards that apply to all health care workers focused on providing quality health services. Topics include key factors of professionalism, communication skill assessment, employability skills, health care teams, career decision making, diversity, legal and ethical boundaries, and professional development.
Prerequisites: DE 0010, DE 0004 or appropriate placement test scores.

4810 Nurse Aide Training 4-4-6
A course that introduces students to caring for the elderly in long-term care facilities. Topics include: communication and interpersonal skills, mental health and social service needs, resident rights, safety and emergency procedures, and basic restorative services. Successful course completion qualifies students to take the Ohio Board of Health Competency Evaluation Test.
Prerequisites: Current health records.

4812 Introduction to the Patient Care Assistant Role 2-2-3
A course that prepares students for employment in acute care facilities as nursing assistive personnel. Topics include: role definition/clarification, communication, basic anatomy/physiology concepts with associated observations, overview of nutrition/diet therapy, introduction to common pathologies, and commonly delegated skills.
Prerequisites: MCH 4810 (minimum grade C), or must be on the State Nurse Aide Registry or eligible; DE 0011 and DE 0024; or must have passing scores on each of the TABE tests.

4813 Restorative Aide Training 1-2-2
An overview of the restorative aide role and responsibilities for employment in acute care or long-term care environments. Topics include: rehabilitation services to return individuals to optimal mobility and functioning following various conditions.
Prerequisites: State Tested Nurse Aide or current NATP Certification.

4814 Direct Patient Care Experience 0-3-1
A clinical course providing direct patient care experience in either acute or long term care facilities. Depending on educational preparation, students function as nurse aides or patient care assistants under the direct supervision of an RN instructor.
Prerequisites: State Tested Nurse Aide.

4815 Accelerated Medical Terminology 6-0-6
An accelerated version of medical terminology combining MCH 4806 and MCH 4807. Topics include: prefixes, suffixes, word roots, combining forms, singulars and plurals, terminology and abbreviations associated with body organization, body systems, oncology, radiology, nuclear medicine, pharmacology, and other medical specialties.
Prerequisites: None.
Corequisites: None.

4816 Health and Wellness Promotion 2-0-2
A course on consumer health and wellness issues. Topics include: self empowerment, stress reduction, physical fitness, healthy eating, addiction avoidance, reduction of risk factors in disease and alternative therapies, aerobic exercise, meditation, and blood pressure and blood glucose screenings.
Prerequisites: None.

4819 Problem-Solving for the Health Care Professional 2-0-2
A course on improving problem-solving skills by applying clinical reasoning to health related situations. Uses an interdisciplinary approach.
Prerequisites: Admitted to a Health and Public Safety Division degree or certificate program.

4840 Orientation to the Health Record and Legal Issues 2-2-3
A course on the content and format of the health record. Topics include: standard health record forms, legal issues that relate to the health record, basic rules of health record maintenance, and filing and retrieving diagnostic reports.
Prerequisites: MCH 4806 (minimum grade C).

4841 Unit Coordinator Procedures 1 2-2-3
Topics include: the processing of patient charts for admission, transfer, and discharge; transcription of nursing treatment orders, medication orders, respiratory and physical therapy orders; and the use of relevant computer software.
Prerequisites: MCH 4840 (minimum grade C).

4842 Unit Coordinator Procedures 2 2-4-4
A continuation of MCH 4841. Topics include: X-ray procedures, MRI scan, nuclear medicine, ultrasound, and endoscopy. Course is parallel to a field experience in an area health care facility.
Prerequisites: MCH 4841 (minimum grade C).

4870 Basic Electrocardiography & Arrhythmia Recognition 2-2-3
An introduction to the principles of electrocardiography. Topics include: the electrical conductive system of the heart, patient preparation, setting up the ECG machine, recognizing and correcting distortion problems, basic arrhythmias, and special procedures.
Prerequisites: BIO 4073 (minimum grade C), DE 0011 or DE 0018, DE 0005, or appropriate placement test scores.

4871 Advanced Arrhythmia Recognition 3-0-3
An advanced course in electrocardiography. Topics include: recognizing arrhythmias; review of basic ECG principles; interpretation of various types of atrial function and ventricular dysrhythmias; and various measurements and calculations to aid in interpretation.
Prerequisites: MCH 4870 (minimum grade C).

4880 MCH Health Care Settings 3-0-3
A course on the interdisciplinary relationship between various health care professionals. Students visit selected health care settings.
Prerequisites: MCH 4840 (minimum grade C).

4881 Current Issues in Health Economics 3-0-3
A study of current trends and issues in health care systems economics. Topics include: the differences between medical care and other commodities in the study of economics.
Prerequisites: MCH 4001 (minimum grade C).

4882 Law and Ethics for Health Care 3-0-3
Topics include: legal and ethical issues that face the interdisciplinary health care team. Students evaluate case studies relevant to their academic discipline.
Prerequisites: None.

4883 General X-ray Machine Operation 3-0-3
A course that prepares students for Ohio Licensure as a General X-ray Machine Operator. Topics include: instruction on radiation physics, radiographic techniques, darkroom processing and film handling, radiation health safety and protection, and radiation biology.
Prerequisites: None.

4884 Cultural Competency for Health and Public Safety Professions 3-0-3
A course on concepts and techniques for developing an understanding of the construct of cultural competency as it relates to fields of Health and Public Safety. Topics include: skill building; the influence of race, culture, and ethnicity in shaping values; belief systems; and behaviors of patients and health care professionals.
Prerequisites: DE 0011 (or appropriate placement test score) or ENG 1001 (minimum grade C).

4885 Health Care Team-Based Management 3-0-3
A course that prepares health care supervisors and managers for their changing role in high-performance environments. Topics include: developing skills in enhancing trust levels, coaching team-based problem solving and decision making, and developing partnerships.
Prerequisites: PSY 1502 (minimum grade C).

4886 Quality Issues in Health Care 3-0-3
Topics include: governmental and quasi-governmental organizations responsible for health care accreditation and regulation, health care provider departments charged with addressing regulation, and major issues and trends affecting the delivery of quality health care services.
Prerequisites: None.

4898 Special Studies - Multicompetency Health Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

4899 Special Studies - Multicompetency Health Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

MET Mechanical Engineering Technologies

7002 Engineering Graphic Concepts 1-2-2
An introduction to basic drafting techniques such as line quality, lettering, and geometric construction; prepares students for success in ET 7008 and CET 7024. Required for all Engineering Technology pre-tech students unless specifically waived by the Dean of the Center for Innovative Technologies.
Prerequisites: None.

7005 Introduction to Blueprint Reading 2-2-3
Topics include: machine-trades, blueprint reading, shop sketching, and technical terminology.
Prerequisites: None.

7108 Engineering Drawing 1 with AutoCAD 2-3-3
An introduction to mechanical drafting and computer aided design. Students learn the fundamentals of drafting and progress to using CAD to create multiview machine component drawings. Topics include: geometric construction, orthographic projection, sections, auxiliary views, and dimensioning.
Prerequisites: None.

7110 Mechanical Design AutoCAD 1 2-3-3
A course on efficient CAD operation. Topics include: updated drafting and dimensioning techniques per the ANSI Y14.5M-1994 standard, and two-dimensional machine and component drawings.
Prerequisites: None.

7111 Engineering Materials 3-2-4
A course on the basics of engineering materials. Topics include: steel, steel alloys, cast iron, aluminum, polymers, ceramics, and composites; and manufacturing, strengthening, and materials testing procedures. Students use the materials testing laboratory to study physical and mechanical properties of materials.
Prerequisites: PHY 2222 or PHY 2291.

7120 Mechanical Engineering Technology CAD 2 2-3-3
A course on building 3-D CAD models. Topics include: wireframe, surfaced, and solid models.
Prerequisites: MET 7108.

7121 Engineering Drawing 2 with AutoCAD 2-3-3
A continuation of MET 7108, emphasizing advanced drawing techniques using AutoCAD. Topics include: secondary auxiliary views, sectioning, dimensioning, class of fits, surface finish designations, tolerancing, threads, fasteners, welding representations, stack-up analysis, and geometric feature controls dimensioning.
Prerequisites: MET 7108.

7122 Mechanical Engineering Technology CAD 3 2-3-3
Students produce complex three-dimensional models using advanced computer -aided design and drafting software packages.
Prerequisites: MET 7120, MET 7121.

7125 Visual BASIC (MET) 2-3-3
A course on using Visual BASIC to write and code MET-related software. Topics include: form layout and definition, labels and text boxes, command buttons, option buttons, variable types, arrays, for-next loops, and if statements. Students need experience with Microsoft Windows.
Prerequisites: None.

7130 Engineering Mechanics-Statics 3-2-4
A course on how forces act on rigid structures. Topics include: using vector algebra to determine component forces and moments and their effects on machine parts, frames, and structures in static equilibrium; vector analysis; free body diagrams; evenly distributed loads; equilibrium; trusses and frames; friction; center of gravity; and moment of inertia.
Prerequisites: MAT 1191 and MAT 1172; PHY 2291

7132 Hydraulics & Pneumatics 1 2-3-3
A course on applied hydraulics and pneumatics. Topics include: fluid transport, power systems, pumps, compressors, control logic, actuators, motors, reservoirs, piping, and safety. Using CAD, students create control schematics with ANSI symbols and test these systems in the lab.
Prerequisites: MAT 1191, PHY 2291.

7140 Strength of Materials 3-3-4
A course on analyzing stresses and strains that occur within machine and structural elements subjected to various types of loads. Topics include: axial and bending stresses; direct, horizontal, and torsional shear; deflection; and combined stresses.
Prerequisites: MET 7130.

MET Mechanical Engineering Technologies
MGT Management

7141 Kinematics & Dynamics of Machines 3-2-4
A course on analyzing mechanisms. Topics include: linear and angular displacement, velocity, acceleration, work, force, horsepower, harmonic motion, mass moment of inertia, dynamic balance, and mathematical, computer aided design, and graphical solutions of machine kinematics and dynamics.
Prerequisites: MAT 1192, PHY 2292.

7145 Statics and Strength of Materials 2-3-3
A course on statics and strength of materials. Topics include: the effects of forces and stresses on materials in various forms; configurations found in manufacturing and mechanical engineering; and using mathematics to analyze forces, stresses, moments, equilibrium, centroids, and moments of inertia.
Prerequisites: MAT 1191 or MAT 1172.

7148 Applied Thermodynamics 3-2-4
A course in the engineering study of energy. Topics include: first and second laws of thermodynamics, energy equation of gases, Mollier diagrams, energy utilization, heat transfer, specific heat, carnot cycle, entropy, enthalpy, adiabatic processes, steam generation and turbines, internal combustion engines, and refrigeration.
Prerequisites: PHY 2292.

7150 Machine Design 1 3-3-4
A course on applying the principles of engineering mechanics and strength of materials to the analysis and selection of mechanical components. Topics include: combined stresses, failure theories, shaft components, shaft design, and fasteners. Students complete a design project.
Prerequisites: MET 7140.

7152 Hydraulics & Pneumatics 2 2-3-3
A continuation of MET 7132, emphasizing the operation and control of solenoid-operated valves used in both hydraulic and pneumatic circuits. Topics include: digital concepts, relay logic application, and ladder diagrams.
Prerequisites: MET 7132.

7155 Machine Design 2 3-3-4
A course on the components used in modern machinery. Topics include: springs, gears and gear trains, belts and chains, bearings, power and ball screws, power transmission, clutches, and brakes.
Prerequisites: MET 7140.

7158 MET Design Project 2 2-3-3
A continuation MET 7198. Topics include: manufacturing the completed design and prototype of the assigned project from MET 7198.
Prerequisites: MET 7198.

7198 MET Design Project 1 2-6-5
A project-based course in which students participate in a team design project. Topics include: feasibility study, design concepts, detail and assembly drawings, bill of materials, commercial and fabricated parts, vendors, costs, and manufacturing.
Prerequisites: MET 7140 or MET 7145, MET 7121.

7199 Special Problems Seminar - Mechanical Var-Var-Var
Individual and independent study and special projects pertaining to the particular program in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair.
Prerequisites: Varies.

7220 Plastic Materials and Processes 1 2-3-3
An introduction to material properties and applications. Topics include: the design, manufacture, finishing, assembly, and environmental impact of plastic materials.
Prerequisites: None.

7230 Plastic Materials and Processes 2 2-3-3
A continuation of MET 7220 emphasizing polymer materials and processes. Topics include: organic chemistry, macro-molecular principles, thermosets, thermoplastics, elastomeric materials, and plastic processing.
Prerequisites: MET 7220.

7240 Plastic Materials and Processes 3 3-2-4
A continuation of MET 7230 emphasizing polymer manufacturing. Topics include: process selection, control of variables, troubleshooting, injection molding, extrusion, blow molding, vacuum and pressure thermoforming, finishing, and mold design.
Prerequisites: MET 7230.

7250 Plastic Materials and Processes 4 3-2-4
An advanced course on injection mold design. Topics include: complete mold design projects with a comprehensive treatment of fluid dynamics, stress analysis, heat transfer, and other mold design considerations.
Prerequisites: MET 7240.

7310 Manufacturing Processes with CNC Programming 2-3-3
A course on material fabricating fundamentals. Topics include: metal removing processes; turning, facing, milling, and drilling; measuring techniques; materials considerations; feeds and speeds; tooling requirements; and manufacturing with plastics and composites. Students generate CNC programs and computer simulation of machining operations.
Prerequisites: MAT 1162 or appropriate placement test mathematics score.

7320 Advanced CNC Programming 2-3-3
A continuation of MET 7310. Topics include: advanced CNC programming of complex parts on two axis mills and lathes, and CNC control.
Prerequisites: MET 7310.

7330 CAD-CAM 1 2-3-3
An introduction to CAD/CAM. Topics include: CAM simulation, hands-on machining of lab parts, and prototyping techniques. Students use CAD files and CAM software to create a CNC program for producing the part on a CNC machine.
Prerequisites: MET 7320, MET 7108.

7340 CAD-CAM 2 2-3-3
A continuation of MET 7330. Topics include: CAM simulation, hands-on machining, prototyping, and an introduction to metal casting. Students generate multi-piece parts using CAD and use CAM software to create a CNC program for producing the parts on a CNC machine.
Prerequisites: MET 7330.

7345 Manufacturing Process Planning and Estimating 2-3-3
A course on estimating the cost to manufacture a product to specifications. Topics include: manufacturing processes, sequencing of operations, tooling, material usage, quality considerations, direct and indirect rates and times, burden and overhead, and basic time and motion concepts.
Prerequisites: MET 7310.

7346 Manufacturing Facility Layout and Material Handling 2-3-3
A study of the procedures and design of an efficient facility layout. Topics include: data collection and analysis methods, materials handling, and functional plant design.
Prerequisites: MET 7345.

7351 CAD-CAM 3 3-3-4
A continuation of MET 7340. Topics include: generating 3-D contour parts using CAD, using CAM software to create a CNC program for producing the parts on a CNC machine, CAM simulation, hands-on machining, and prototyping.
Prerequisites: MET 7340, MET 7120.

7355 Quality Control with SPC 2-3-3
A course on control concepts in manufacturing. Topics include: quality history and evolution, product requirements, continuous improvements, zero defects, sampling plans, total quality control, statistical process control, total quality management, and ISO 9000 concepts.
Prerequisites: MAT 1192.

7360 Manufacturing Quality Processes: Six Sigma 2-3-3
A course in Six Sigma methodology that examines using data to monitor, control, and improve operational performance in manufacturing processes and eliminate product defects. Topics include: an overview of Six Sigma and a review of several case studies.
Prerequisites: MET 7355.

MGT Management

1832 Human Resource Management 3-0-3
A broad overview of the traditional functions of a personnel office. Topics include: job evaluation, recruitment, interviewing, training, employee and union relations, employee services, and concepts concerning human relations and organizational behavior.
Prerequisites: None.

1833 Compensation Management 3-0-3
A course on the strategic relevance of compensation systems. Topics include: applicable regulations, management and administration of pay-for-performance, piece rates, commissions, and other pay and incentive plans.
Prerequisites: MGT 1832.

1834 Employee Benefits 3-0-3
A course on the fundamental concepts of employee benefits. Topics include: social security benefits, group insurance, cafeteria plans, retirement plans, pension benefits, and workers' compensation.
Prerequisites: MGT 1832.

2904 Managing Recreation, Parks, and Leisure Services 3-0-3
Park and recreation professionals apply knowledge and understanding of leisure behavior to create an environment that facilitates leisure experiences. These professionals manage parks, facilities, programs, services, and/or human and natural resources in public, non-profit, and for-profit settings. Capstone project assesses general administration, programming, and operations management.
Prerequisites: None.

2905 Contact Center Customer Service 2-0-2
An introduction to contemporary customer service issues in today's contact center businesses with a focus on improving individual performance and attaining strategic business imperatives. Students develop the knowledge and skills to communicate positively and professionally with customers in a contact center environment.
Prerequisites: None.

2906 Effective E-mail Communications 1-0-1
A course on the skills necessary to effectively, positively, and professionally communicate through e-mail in a customer service, direct marketing, or e-commerce relationship.
Prerequisites: None.

2907 Contact Center Coaching Skills 2-0-2
A course that provides prospective and current team leaders, supervisors, and managers with the knowledge and skills necessary to teach and reinforce service skills used in a contact center environment.
Prerequisites: None.

2908 Customer Service in Technical Support 2-0-2
A course in which students master skills for performing customer-focused technical support calls. This course is designed especially for technology-based industries. Students learn how to interact positively with both internal and external customers.
Prerequisites: MGT 2905.

2910 Employee Retention Systems 4-0-4
A course on employee retention systems. Topics include: understanding and applying eight employee retention systems and changing corporate culture related to front-line employee retention.
Prerequisites: None.

2929 Construction Business Practices 4-0-4
An overview of general business and construction practices. Topics include: business start-up, marketing, finance, insurance, taxes, management, general accounting, bookkeeping methods, hiring, bonding, overhead, and profit determination. Students prepare a business plan for a small construction company.
Prerequisites: None.

2963 Risk Assessment and Liability 3-0-3
An introduction to organizational risk management including the need for and assessment of liability insurance on business assets.
Prerequisites: None.

2965 Principles of Management 1 3-0-3
An in-depth course for management majors. Topics include: the history of management, the varied domestic and global environments for management, and the management functions of planning and organizing. Students apply these theories to case studies.
Prerequisites: None.

2966 Principles of Management 2 3-0-3
A continuation of MGT 2965. Topics include: the controlling function, techniques of motivation, leadership, and managing teams. Students apply these theories to case studies.
Prerequisites: MGT 2965.

2967 Introduction to Management 3-0-3
A course for non-management majors who assume supervision duties. Topics include: planning, organizing, influencing, and controlling for domestic and international businesses. Students apply these theories to case studies.
Prerequisites: None.

2970 Contemporary Leadership 3-0-3
An overview of the role of the successful integrative leader in modern organizations. Through discussions, case studies, and exercises students examine historical and contemporary approaches to leadership, including corporate practices to develop leadership. The course focuses on individual and organizational leadership perspectives.
Prerequisites: MGT 2966 or MGT 2967 or program chair consent.

2971 Entrepreneurship 3-0-3
An introduction to the ownership and operation of a small business. Topics include: formation and start-up, basic sources of funding and financial management, location, and layout. Students develop a business plan.
Prerequisites: None.

2972 Business and Implementation Planning 3-0-3
A continuation of MGT 2971. Topics include: the elements of management and control, marketing, legal implications, and government regulations that affect a small business owner.
Prerequisites: MGT 2971.

2975 Business Management Seminar 2-3-3
An in-depth management course using case study and simulation methods. Topics include: the entire scope of management including all functional and decision-making areas.
Prerequisites: ACC 2912 or ACC 2927, MGT 2966.

2977 Students in Free Enterprise 1-0-1
Students develop two projects completed during the term and one project continued in subsequent terms. Projects must follow SIFE mission to develop leadership, teamwork, and communication skills through learning/teaching free enterprise principles.
Prerequisites: None.

2986 Individual Performance Development 3-0-3
Students learn skills to ensure adequate performance of employees. Topics include: establishing clear expectations, and using motivational and coaching techniques to enhance employee performance. Students participate in structured experiences.
Prerequisites: None.

2987 Change Management for Quality 3-0-3
Students learn how situational leadership styles foster work process and performance improvements. Topics include: change management strategies that lead to innovation and higher quality products and services. Students participate in structured experiences.
Prerequisites: None.

2988 Quality Management 3-0-3
Students learn the concepts involved in focusing the resources in a manufacturing and service organization on continual improvement of both quality and productivity. The focus of the course is on quality assurance and establishing a quality culture.
Prerequisites: MGT 2966 or MGT 2967 or program chair consent.

2989 Customer Service Systems 3-0-3
A course on the fundamentals of developing and keeping customers. Topics include: creating a customer-focused organizational framework, using customer feedback systems, and developing customer-driven reward systems.
Prerequisites: ENG 1003 or ENG 1010 or ENG 1011.

2996 Project Management 3-0-3
An introduction to project management for various industries. Topics include: setting project goals, managing schedules and workloads, allocating resources, dealing with departmental issues, and delegating within a project team structure.
Prerequisites: None.

3110 Employee Benefits: Concepts and Health Care Benefits 3-0-3
A course on employee benefits. Topics include: health care plan types, plan design, and cost-control techniques.
Prerequisites: None.

MGT Management
MMC Industrial Maintenance

3111 Employee Benefits: Design, Administration, and Other Welfare Benefits 3-0-3
A course on employee welfare benefits. Topics include: dependent care and family leave benefits, work/life benefits, vacation, and other time-off benefits; flexible benefit plans and flexible spending accounts; and the administration, funding, communication, and taxation of welfare plans.
Prerequisites: MGT 3110.

3112 Retirement Plans: Basic Features and Defined Contribution Approaches 3-0-3
A course on designing retirement plans. Topics include: profit-sharing plans, thrift and savings plans, Section 401(k) cash or deferred arrangements, employee stock ownership and stock bonus plans, IRAs, simplified employee pensions, SIMPLE plans, tax-deferred annuities, and executive retirement arrangements.
Prerequisites: None.

3113 Retirement Plans: Defined Benefit Approaches and Plan Administration 3-0-3
A course on pension plan fundamentals. Topics include: plan design, costs and funding, plan asset investment, plan termination insurance, creating hybrid plans and early retirement incentives, and structuring retirement plans to meet the needs of executives.
Prerequisites: None.

3114 Compensation: Concepts and Principles 3-0-3
A course on types of compensation approaches. Topics include: pay structure types; management functions that maintain internal alignment, enhance organizational competitiveness, and create employee incentives; compensating special groups, external market forces affecting compensation, the collective bargaining process, and legal considerations.
Prerequisites: None.

3115 Human Resources and Compensation Management 3-0-3
An overview of human resource management. Topics include: internal and external factors affecting supervision; incentive programs; total compensation approaches and implementation strategies; employee rights; the application of disciplinary, discharge, and termination situations; labor relations; and the collective bargaining process.
Prerequisites: None.

3116 Asset Management 3-0-3
An introduction to asset management in the context of setting investment objectives for pension plan assets. Topics include: securities markets, investment analysis and theory, investment strategies, stock and fixed income security appraisal, and federal securities regulations.
Prerequisites: MGT 3110.

3117 Health Economics 3-0-3
A course on health economics issues using microeconomic tools. Students gain a theoretical basis for understanding the practical issues in health plan design, management, and administration.
Prerequisites: MGT 3110.

3118 Training Delivery and Facilitation 3-0-3
A course on techniques for successful implementation of training and information sessions in a business environment.
Prerequisites: MGT 1832.

3119 Staffing and Talent Management 3-0-3
A course on techniques and resources for staff and talent management. Topics include: strategies for recruiting and hiring and the performance management systems human resource professionals use.
Prerequisites: MGT 1832.

MKT Marketing

1810 Principles of Sales 3-0-3
A course on the general principles and techniques of effective salesmanship. Topics include: requisite background information for successful sales, and analysis of the selling process. Sales presentation required.
Prerequisites: None.

1844 Principles of Advertising 3-0-3
An introduction to the advertising field and to the sales message planning and production process. Topics include: research, media buying and planning, copywriting, art direction, print and broadcast production, media sales, sales promotion and product publicity, budgeting, and scheduling.
Prerequisites: None.

1845 Principles of Retail Management 3-0-3
An introduction to the retailing field. Topics include: the technical and theoretical knowledge necessary for retail mid-management employment. Students use case studies to gain practical operating experience.
Prerequisites: None.

1873 E-Commerce Business Strategy 2-2-3
An overview of electronic commerce. Topics include: differences and similarities between e-commerce and traditional commerce, and goals and experiences in communicating, gathering information, shopping, and maintaining relationships.
Prerequisites: None.

1878 Internet Advertising 2-2-3
A course on the principles of advertising as they relate to the unique challenges of advertising on the Web.
Prerequisites: None.

1880 Logistics and Transportation Strategies 3-0-3
A course on the role of transportation logistics in business enterprises. Topics include: the efficient flow of raw materials, in-process inventory, finished goods from point of origin to point of consumption, and transportation modes focusing on the relationships between suppliers, producers, and consumers.
Prerequisites: None.

2901 Principles of Marketing 1 3-0-3
A course on the fundamentals of the marketing mix – promotion, distribution, price, and product, and how they relate to business operations in satisfying domestic and international customers.
Prerequisites: None.

2902 Principles of Marketing 2 3-0-3
A continuation of MKT 2901, including competitive strategies for attracting, retaining, and growing customers. Topics include: strategic planning, market research, new product development, pricing consideration, personal selling and sales management, retailing, wholesaling, and direct and online marketing.
Prerequisites: MKT 2901.

2909 Principles of Telephone Sales 2-0-2
A course on the strategies and skills needed to prospect, sell, and manage accounts when telephone selling in a contact center environment.
Prerequisites: None.

2910 Marketing Research for Multimedia Professionals 3-0-3
A course on marketing fundamentals applied by professionals in multimedia fields. Topics include: terminology and key concepts, applying marketing to business operations and customer satisfaction, and using varied techniques to gain effective and ethical solutions to market research problems.
Prerequisites: None.

2990 Entrepreneurial Marketing 3-0-3
A course for potential new or small business owners. Topics include: selecting marketing strategies, managing marketing efforts, and successful marketing methods.
Prerequisites: None.

2997 Marketing Research 3-0-3
An introduction to market research emphasizing using research data in marketing and management decisions. Students design a market research study, use data collection methods, use measurement tools, perform data analysis, use online market research tools, and communicate their research findings.
Prerequisites: MAT 1123 or MAT 1151, MKT 2902.

2998 Direct Marketing 3-0-3
A course on direct marketing theory and practice. Topics include: direct marketing's function in company marketing strategies, direct-response television/radio strategies, database marketing, list selection and evaluation, telemarketing, catalog marketing, fulfillment, and internet marketing. Students plan a direct marketing program.
Prerequisites: MKT 2902, MKT 1844.

MMC Industrial Maintenance

1010 Basic Shop Math 1-0-1
A review of basic mathematical skills emphasizing math used in the maintenance trades. Topics include: decimals, fractions, percents, ratios, proportions, roots, powers, basic algebra, and basic trigonometry.
Prerequisites: None.

2010 Mechanical Drive Maintenance 3-1-3
A course on the fundamentals of mechanical transmission systems used in industrial applications. Topics include: operation, installation, performance analysis, and design of basic mechanical transmission systems and using chains, v-belts, spur gears, bearings, and couplings.
Prerequisites: None.

2020 Introduction to Bearings, Seals & Lubrication 1-1-1
An introductory course on how to operate, install, analyze, troubleshoot, and select bearings, gears, and lubrication for mechanical systems.
Prerequisites: None.

2030 Vibration Analysis for Mechanical Systems 2-1-2
A course on the measurement, analysis, and reduction of vibration in industrial machinery. Topics include: vibration concepts, meters, measurement, baseline comparisons, severity charts, isolation, and dampers.
Prerequisites: None.

2040 Laser Alignment for Mechanical Systems 2-1-2
A course on the setup and operation of laser alignment tools to align a variety of industrial applications. Topics include: motor base adjustment, laser safety, alignment principles, laser operation, alignment setup, vertical and parallel alignment, and soft foot correction.
Prerequisites: None.

MUS Music

1665 Introduction to Music: Middle Ages to Early 19th Century 3-0-3
An introduction to major periods in Western musical history from the Middle Ages to the early nineteenth century. Topics include: major composers of the Western musical tradition and development of perceptive listening habits through analysis of compositional styles and techniques.
Prerequisites: None.

1666 Introduction to Music : The 19th and 20th Centuries 3-0-3
An introduction to the major periods in Western musical history from the nineteenth century Romantic period to the twentieth century. Topics include: jazz, American musicals, early rock, and developing perceptive listening habits through analyzing compositional styles and techniques.
Prerequisites: None.

1667 Introduction to Music: Musical Styles 3-0-3
An introduction to musical styles. Topics include: voices and the musical stage in Western culture including jazz, ragtime, blues, swing, and other styles presented in American musicals and operettas of Broadway and Hollywood. Emphasizes development of perceptive listening habits.
Prerequisites: None.

1668 Special Topics in Music Var-Var-Var
A course involving study and discussion of selected topics in music. Content and emphasis may vary from term to term.
Prerequisites: None.

1669 Musical Concepts 3-0-3
An introduction to the fundamentals of music including ear training, basic theory, and note reading using popular music and familiar tunes. Topics include: melody, harmony, rhythm, and notation.
Prerequisites: None.

NUR Nursing

4901 Academic Strategies for Nursing Students 2-2-3
A course on understanding the nursing discipline and the principles of nursing practice. Topics include: professionalism, professional communication, success skills (time management, study skills, and test-taking skills), medication dose calculations, critical thinking and problem solving, evidence-based practice, nursing process, and concept mapping.
Prerequisites: Instructor consent.

4918 Ohio Nursing Articulation Model Transitions Course 3-5-5
A course for LPNs participating in the Ohio Nursing Articulation Model. Students validate prior learning, enhance knowledge of the nursing field, begin transition to the RN role, and prepare for advanced placement into a Nursing associate's degree program.
Prerequisites: Admitted to the NURP technical sequence or NURP program chair consent.
Corequisites: BIO 4016.

4922 Role Transition in Nursing 1 5-5-6
A course for the LPN admitted to the Alternative Track. Topics include: wellness across the life span and review of common health problems. Students apply content in selected community and hospital settings.
Prerequisites: BIO 4016, NUR 4918 (minimum grade C for both).

4923 Mental Health Nursing (NURP) 3-6-5
A course on nursing care of the emotionally distressed client. Topics include: theories of human behavior, major psychiatric disorders, and professional use of self to effectively communicate and provide care. Clinical experiences occur in a variety of settings.
Prerequisites: NUR 4922 (minimum grade C).
Corequisites: NUR 4928.

4924 Nursing of Children (NURP) 3-6-5
A course for the LPN admitted to the Alternative Track. Topics include: nursing care of the infant through adolescent within the family unit, effective communication, development issues, childhood illnesses, and their impact on the family. Clinical experiences occur in a variety of settings.
Prerequisites: PSY 1508, NUR 4923, NUR 4928 (minimum grade C for all).
Corequisites: NUR 4925.

4925 Perinatal Nursing and Health Issues of Women (NURP) 3-6-5
A course for the LPN admitted to the Alternative Track. Topics include: nursing care of the childbearing family, reproductive and health issues of women, sexually transmitted infections, and perinatal experiences. Clinical experiences occur in a variety of settings.
Prerequisites: PSY 1508, NUR 4923, NUR 4928 (minimum grade C for all).
Corequisites: NUR 4924.

4926 Adult Nursing (NURP) 6-8-9
A course for the LPN admitted to the Alternative Track. Topics include: holistic nursing responses to medical/surgical health problems, continuity of care, and collaboration. Clinical experiences occur in a variety of acute care settings.
Prerequisites: NUR 4924, NUR 4925 (minimum grade C for both).

4927 Role Transition in Nursing 2 6-12-10
A course that focuses on transition to professional nursing for the LPN admitted to the Alternative Track. Achievement of a predetermined score on a national standardized nursing achievement exam is a requirement for completion.
Prerequisites: NUR 4926 (minimum grade C).

4928 Gerontological Nursing 2-0-2
A course on nursing care of the older adult. Topics include: aging processes, health promotion, and special concerns of the aging population.
Prerequisites: NUR 4922 (minimum grade C).
Corequisites: NUR 4923.

4931 Nursing Skills Laboratory 1 0-3-1
The first of two skills lab courses. Topics include: selected psychomotor nursing skills, medical math skills, medical terminology, and basic computer skills.
Prerequisites: Admitted to the nursing technical sequence.
Corequisites: NUR 4933.

4933 Introduction to Nursing 4-3-5
A technical course on the role of nursing in health care. Topics include: critical thinking, professional behavior, nursing process, effective communication, teaching/learning principles, and cultural diversity. Includes laboratory/clinical experiences.
Prerequisites: Admitted to the nursing technical sequence.
Corequisites: NUR 4931.

4937 Nutrition and Diet Therapy in Nursing 2-2-3
Fundamental principles of normal and therapeutic nutrition for individuals throughout the lifespan. Lab activities include a variety of application processes including alternative methods for provision of nutrients. Team taught by an RD and an RN.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C).

4941 Nursing Skills Laboratory 2 0-3-1
The second of two skills lab courses. Students practice and demonstrate competency in the performance of selected intermediate-level psychomotor and math skills.
Prerequisites: PSY 1508, BIO 4016, NUR 4931, NUR 4933 (minimum grade C).
Corequisites: NUR 4943, NUR 4946, BIO 4018.

NUR Nursing
OPT Ophthalmic Optics Technology

4943 Common Health Problems in Nursing 6-6-8
Planning and administration of basic nursing care for adults. Topics include: nursing response to common health problems such as diabetes, pain, the perioperative experience, immune responses, and cardiovascular and respiratory diseases.
Prerequisites: PSY 1508, BIO 4016, NUR 4931, NUR 4933 (minimum grade C).
Corequisites: NUR 4941, NUR 4946, BIO 4018.

4946 Health Assessment in Nursing 1 1-3-2
A course on health assessment. Topics include: assessment of thorax, lungs, heart, blood vessels, abdomen, and skin; interviewing; documentation; and physical assessment skills. Students apply skills in clinical settings.
Prerequisites: PSY 1508, BIO 4016, NUR 4931, NUR 4933 (minimum grade C).
Corequisites: NUR 4943, NUR 4941, BIO 4018.

4953 Mental Health Nursing 3-6-5
Nursing care of the emotionally distressed client. Topics include: theories of human behavior, major psychiatric disorders, and professional and sensitive use of self to effectively communicate and provide care. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C).
Corequisites: NUR 4954, NUR 4956.

4954 Gerontological Nursing 3-6-5
A course on nursing care of the older adult. Topics include: aging processes; special concerns for older adults; promotion, maintenance, and restoration of health; and coping with chronic illness. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C).
Corequisites: NUR 4953, NUR 4956.

4956 Health Assessment in Nursing 2 1-3-2
The second of two health assessment courses. Topics include: assessment of head, neck, breast, neurological, and musculoskeletal systems.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C).
Corequisites: NUR 4954, NUR 4953.

4963 Perinatal Nursing and Womens Health Issues 3-6-5
Nursing care of the childbearing family. Topics include: effective communication with families, womens health and reproductive issues, sexually transmitted infections, and the perinatal experience. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C).
Corequisites: NUR 4964.

4964 Nursing Care of Children 3-6-5
A course on nursing care of the infant through adolescent within the family unit. Topics include: effective communication, developmental issues, childhood illnesses, and their impact on the family. Clinical experiences occur in a variety of settings.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C).
Corequisites: NUR 4963.

4973 Adult Nursing 6-12-10
A course on holistic nursing responses to medical-surgical health problems. Topics include: continuity of care and collaboration. Clinical experiences occur in a variety of acute care settings.
Prerequisites: NUR 4953, NUR 4954, NUR 4956, NUR 4963, NUR 4964 and completion of COMM 10XX and nursing electives (minimum grade C for all).

4981 Transitional Clinical Experience 0-18-6
Application of nursing curriculum in a variety of settings. Topics include: care planning, supervision, and delegation. Achievement of a predetermined score on a national standardized nursing achievement exam is a requirement for completion.
Prerequisites: NUR 4973, ENG 1010, ENG 1003 (minimum grade C for all).
Corequisites: NUR 4982.

4982 Management of Client Care 6-0-6
Provision of care for a group of clients in a variety of settings and the transition from the role of student to that of professional nurse. Topics include: role definition, delegation, management, coordination, decision-making, and the Ohio law regulating the practice of nursing.
Prerequisites: NUR 4973, ENG 1010 or ENG 1003 (minimum grade C for all).
Corequisites: NUR 4981.

4993 Special Topics in Nursing 1-2-2
Special topics reflecting dynamic trends in nursing and special client, diagnostic or other related issues.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C for all).

4998 Special Studies in Nursing Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member, carried on outside the classroom. Before registration, students must have the plan of study approved by a supervising faculty member and the Nursing program chair.
Prerequisites: Program chair consent.

4999 Special Studies in Nursing Var-Var-Var
An student-initiated academic pursuit, mutually agreed upon by the student and faculty member. Before registration, students must have the plan of study approved by a supervising faculty member and the Nursing program chair.
Prerequisites: Program chair consent.

9372 Cooperative Education in Nursing Settings 1-16-2
Work experience for application of knowledge and skills verified by successful nurse aide state testing. Classroom activities focus on work issues.
Prerequisites: BIO 4018, NUR 4941, NUR 4943, NUR 4946 (minimum grade C for all).

OPT Ophthalmic Optics Technology

6810 Ophthalmic Optics 1 3-3-4
Topics include: the electromagnetic spectrum, ultra-violet and infrared radiation, laws of reflection, plain and curved mirrors, laws of refraction and total internal reflection, refraction through prism, refraction at a single spherical surface, refraction through lenses, and cylindrical/toric surfaces.
Prerequisites: MAT 1171.

6812 Ocular Anatomy and Physiology 3-3-4
A course on the structure and function of the eye. Topics include: corneas, tear film, sclera, uveal tract, retinas, optic nerves, lenses, vitreous bodies, eyelids, and orbits.
Prerequisites: None.

6820 Ophthalmic Optics 2 3-3-4
A continuation of OPT 6810. Topics include: thin lens image formation and magnification, multiple lens systems, thick lens equation, lens aberrations, concave and convex mirrors, optical instruments, magnifiers, microscopes and telescopes, characteristics of light, interference, diffraction, and polarization.
Prerequisites: OPT 6810.
Corequisites: MAT 1172.

6830 Ophthalmic Optics 3 3-3-4
A continuation of OPT 6820. Topics include: emmetropia and ametropia of the eye; spectacle and contact lens corrections, accommodation, and ranges of clear vision; equivalent power, principal planes, and vertex distance; and bifocal, sphero-cylindrical, and induced prism lenses.
Prerequisites: OPT 6820.

6831 Ophthalmic Dispensing 1 2-3-3
Topics include: basic ophthalmic frame parts; types of frames; selection of style and type of frame for a given prescription; alignment, adjustment, and repair of eyewear; and measuring interpupillary distance.
Prerequisites: OPT 6820.

6833 Contact Lenses 1 3-3-4
An introduction to the historical development of contact lenses. Topics include: care and handling of various types of contact lenses; instruction on insertion, removal, and hygiene; and contact lens materials.
Prerequisites: None.

6841 Ophthalmic Dispensing 2 2-3-3
A continuation of OPT 6831. Topics include: verifying prescription; ordering proper lens type; record keeping; lens materials, characteristics, tints, and coatings; and fitting bifocal lenses.
Prerequisites: OPT 6831.

6843 Contact Lenses 2 3-3-4
A continuation of OPT 6833. Topics include: contact lens fitting techniques, fitting rules, wearing schedules, contact lens optics, and hard and soft contact lenses.
Prerequisites: OPT 6833.

6845 Mechanical Optics 1 3-3-4
Topics include: surfacing and finishing of spherical and cylindrical lenses; lens power analysis; and surfacing, neutralization, layout, and edging of single vision and multifocal lenses.
Prerequisites: OPT 6820.

6851 Ophthalmic Dispensing 3 2-3-3
A continuation of OPT 6841. Topics include: fitting of cataract lenses, progressive lenses, fitting procedures for special situation dispensing, contact lens dispensing and after care problems for soft and rigid contact lenses.
Prerequisites: OPT 6841.

6855 Mechanical Optics 2 3-3-4
A continuation of OPT 6845. Topics include: prismatic lenses; and surfacing, neutralization, layout, and edging of moderating advanced assignments including cataract, trifocal, prismatic, and other special lenses.
Prerequisites: OPT 6845.

6857 Ophthalmic Clinical Procedures 1 3-3-4
Topics include: case history; visual acuity; refractive errors such as myopia, hyperopia, and astigmatism; retinoscopy; keratometry; and ophthalmometry.
Prerequisites: OPT 6830.

6867 Ophthalmic Clinical Procedures 2 3-3-4
Topics include: low vision and low vision aids, auto-refraction, ophthalmic surgical procedures, tonemetry, the visual field, testing binocular vision, and visual therapy techniques.
Prerequisites: OPT 6857.

6899 Ophthalmic Special Problems Var-Var-Var
Individual and independent study and special projects pertaining to the particular program in which the student is enrolled. The study may deal with an idea or concept not usually covered by existing courses at the College or with a specific problem found in the industry in which the student is employed. Open to fourth and fifth term students by special arrangement with the instructor and program chair. Students receive grades of S or U for this course.
Prerequisites: Program chair consent.

ORTH Orthopaedic Technology

4201 Survey of Anatomy and Physiology for Orthopaedic Technology 2-0-2
A course on the musculoskeletal system in relationship to positioning patients and applying casts. Topics include: joints, bones, ligaments and tendons; soft tissue injuries; fractures and fracture healing; and barriers to healing.
Prerequisites: MCH 4806 and MCH 4807; or MCH 4815 (minimum grade C for all).
Corequisites: ORTH 4202.

4202 Radiology for Orthopaedic Technology 3-2-4
An introduction to the study of x-rays used in the orthopaedic lab. Topics include: ionizing radiation, radiation safety, tissue densities, fractures, views related to the musculoskeletal system, image quality, and the role of the orthopaedic technologist in obtaining and examining x-rays.
Prerequisites: None.
Corequisites: ORTH 4201.

4210 Orthopaedic Techniques 1 4-2-5
Introduction to the cast room and orthopaedic techniques. Topics include: types of supplies and instruments, techniques for the application of basic types of splints and casts, traction set-ups, and application of casts and traction in the laboratory setting.
Prerequisites: ORTH 4201, ORTH 4202 (minimum grade C for both).
Corequisites: ORTH 4211.

4211 Orthopaedic Clinical Practice 1 0-4-2
Directed observation and participation in an orthopaedic clinical setting. Students must provide proof of current CPR certification.
Prerequisites: ORTH 4202 (minimum grade C).
Corequisites: ORTH 4210.

4220 Orthopaedic Techniques 2 4-2-5
A continuation of ORTH 4210. Topics include: techniques for the application of advanced types of splints and casts, advanced traction set-ups, surgical applications, and continued application of casts and traction in the laboratory setting.
Prerequisites: ORTH 4210, ORTH 4211 (minimum grade C).
Corequisites: ORTH 4221.

4221 Orthopaedic Clinical Practice 2 0-4-2
A continuation of ORTH 4211. Directed observation and participation in an orthopaedic clinical setting or surgical setting.
Prerequisites: ORTH 4210, ORTH 4211 (minimum grade of C for both).
Corequisites: ORTH 4220

4298 Special Topics in Orthopaedic Technology Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

4299 Special Topics in Orthopaedic Technology Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

OT Information Management

1850 Introduction to Computer Applications 3-2-4
An introductory course on computer concepts and theory, emphasizing business applications. Laboratory work includes operating PCs using Microsoft Word, PowerPoint, Excel, and Access application software. Distance learning students must provide their own software.
Prerequisites: OT 3007 (minimum grade C) or keyboarding skill level at 20 words per minute.

1863 Electronic Spreadsheets (Excel) 2-2-3
A course on basic spreadsheet operations, commands, formula writing, functions, and graphing using Microsoft Excel.
Prerequisites: DE 0024 (minimum grade C) or appropriate mathematics placement test score

1864 Advanced Electronic Spreadsheets (Excel) 2-2-3
A continuation of OT 1863. Topics include: three-dimensional spreadsheets, advanced formula writing, advanced functions, database construction and manipulation, and introduction to macros.
Prerequisites: OT 1863 (minimum grade C).

3002 Document Formatting 1 2-3-3
A continuation of OT 3001. Topics include: review of keyboard and techniques; improving speed and accuracy; and progress through personal documents, basic business communications, unbound reports, and tables.
Prerequisites: OT 3007 (minimum grade C).

3003 Document Formatting 2 2-3-3
A continuation of OT 3002. Topics include: developing skills, knowledge, techniques, and problem solving applicable to production keyboarding and composition.
Prerequisites: OT 3058, OT 3002 (minimum grade C for both) or keyboarding skill level at 40 words per minute.

3005 Medical Formatting and Transcription 2-3-3
An introduction to medical formatting and transcription with a review in anatomy, medical terminology, symptoms and disease conditions, and grammar as it relates to the field of medical documents. Topics include: proper medical and standard document formatting and efficient operation and use of dictation equipment for medical formatting and terminology.
Prerequisites: MCH 4807, OT 3058 (minimum grade C for both).

3006 Keyboarding: Skill Development 2-3-3
A keyboarding course for students who have had previous instruction on the computer and know the keyboard, but who have not achieved proficiency in speed and/or accuracy to continue on to OT 3002 or OT 3003.
Prerequisites: OT 3007 (minimum grade C) or keyboarding skill level at 20 words per minute.

3007 Introduction to Keyboarding 3-0-3
A course on keyboarding on computers for students who need to learn basic keyboarding skills.
Prerequisites: None.

3016 Introduction to Legal Environment 3-0-3
An introductory course on the legal environment. Topics include: areas of practice, structure of law firms, administrative functions, court systems and procedures, and legal terminology.
Prerequisites: None.

OT Information Management
OTA Occupational Therapy Assistant

3017 Legal Formatting 2-3-3
A course on developing legal formatting speed and accuracy. Topics include: formatting documents and forms found in common areas of law, legal terminology, and Bluebook citations.
Prerequisites: OT 3003, OT 3016 (minimum grade C for both).

3018 Legal Transcription 2-3-3
A course on developing proficiency with transcribing equipment while continuing to enhance legal formatting and terminology skills. Dictation includes letters, memos, and a variety of legal documents with attorney instructions regarding preparation and filing.
Prerequisites: OT 3017 (minimum grade C).

3019 Law Office Practice 2-3-3
A capstone course that uses a project-based approach to completing activities relevant to the administrative duties of the legal assistant.
Prerequisites: OT 3018, LAW 1830 (minimum grade C).

3021 Office Procedures 1 2-3-3
An introduction to the development of personal qualities essential to the office worker and the development of principles and procedures fundamental to basic office duties and activities.
Prerequisites: OT 3007 (minimum grade C) or keyboarding skill level at 20 words per minute.

3022 Proofreading and Editing 2-2-3
A continuation of OT 3035. Students proofread and edit documents online and manually that contain errors in formatting, numbers, capitalization, word division, grammar, pronoun agreement, punctuation, abbreviation, spelling, and synonyms. Students also proofread for content, conciseness, and clarity.
Prerequisites: OT 3035, OT 3058 (minimum grade C for both).

3023 Advanced Machine Transcription and Dictation 2-3-3
An integrated approach to machine transcription and dictation combined with intensive instruction in English usage and grammar. Topics include: operating dictation/transcription equipment, and applying language usage and other skills to the production of various types of written communications.
Prerequisites: OT 3022 (minimum grade C).

3024 Office Procedures 3 2-2-3
A continuation of OT 3032. Topics include: composing, editing, and handling business communications; setting priorities; researching and preparing reports; making travel arrangements; and using office financial and graphics presentation software. Students must have proficiency with word processing software.
Prerequisites: OT 3032 (minimum grade C).

3032 Office Procedures 2 2-3-3
A continuation of OT 3021. Topics include: oral and written office communications and professional development including self discovery, goal setting, problem solving, decision making, stress management, negotiating, and assertiveness.
Prerequisites: OT 3021 (minimum grade C).

3035 Essential Business Correspondence 2-3-3
An intensive, competency-based business correspondence course. Topics include: grammar, punctuation, proofreading, spelling, vocabulary building, and office correspondence origination. Students must reach an 80% competency level to pass the course.
Prerequisites: ENG 1001 (minimum grade C).

3036 Project Management Applications 2-3-3
A hands-on course in which students use Microsoft Project software to develop skills and understanding of the project management process.
Prerequisites: OT 3002, OT 3003, OT 3006, or OT 3007 (minimum grade C) or keyboarding skill level at 20 words per minute.

3058 Microsoft Word for Windows 2-3-3
A course on the practical application of Microsoft Word for Windows. Students complete hands-on exercises and problems using a PC.
Prerequisites: OT 3002, OT 3003, OT 3006, OT 3007 (minimum grade C), keyboarding skills at 30 words per minute, or OT 1850 (minimum grade C).

3064 Introduction to PowerPoint 2-3-3
An introduction to the basics of business presentation graphics using Microsoft PowerPoint presentation graphics software. Keyboarding skill required.
Prerequisites: OT 3002, OT 3003, OT 3006, or OT 3007 (minimum grade C) or keyboarding skill at 20 words per minute.

3068 Database Management: Access 1 2-3-3
A course on database management using Microsoft Access software. Topics include: defining, designing, creating, and maintaining a database.
Prerequisites: Appropriate placement test keyboarding score.

3069 Advanced Microsoft Word 2-3-3
A continuation of OT 3058. Topics include: advanced character/line formatting; advanced page formatting; advanced document formatting; using templates, macros, frames, pictures, Microsoft Draw, tables, and columns; and merging and sorting documents.
Prerequisites: OT 3058 (minimum grade C).

3070 Administrative Office Management 1 3-0-3
An upper-level office management course that emphasizes managing office environments, employees, systems, and functions.
Prerequisites: MGT 2965 (minimum grade C).

3076 Information Systems for Managers 2-2-3
A course on basic principles of information systems. Topics include: use of the Internet, e-mail, and database software.
Prerequisites: OT 1850 (minimum grade C).

3092 Desktop Publishing with Microsoft Publisher 2-2-3
A course on the production of professional-looking documents combining text, pictures, illustrations and photographs using desktop publishing tools in Microsoft Publisher software.
Prerequisites: OT 1850 or OT 3095 (minimum grade C for both); keyboarding skill level at 30 words per minute.

3093 Workplace Technologies 2-2-3
A course on the latest tools used in a business environment, such as pocket PCs, tablet PCs, digital cameras, scanners/PDF files, smart boards, and speech recognition software applications. Topics change as new technology develops.
Prerequisites: OT 1850 or OT 3058.

3094 HR Management Information Systems 2-3-3
A course on software that supports management activities, such as salary and benefits administration, reporting, recruiting, succession planning, and talent management.
Prerequisites: MGT 1832.

3095 Introduction to Computers, Windows, Internet 2-3-3
An introduction to the computer and the tools available to perform tasks effectively using Windows and the Internet. Students become acquainted with terminology and receive ample hands-on lab time.
Prerequisites: OT 3007 (minimum grade C) or keyboarding skill level at 20 words per minute.

9227 Cooperative Education-Information Management 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to EA, IP, LA, MAA, or OM program; 2.0 minimum GPA.

9247 Cooperative Education-Information Management-Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to EA, IP, LA, MAA, or OM program; 2.0 minimum GPA.

OTA Occupational Therapy Assistant

4600 Introduction to Occupational Therapy 2-3-3
An introduction to the history, philosophy, and development of occupational therapy. Topics include: relationship to other allied health professions, the Occupational Therapy Practice Framework, role and function of occupational therapists and occupational therapy assistants, and team approach. Students observe current practice in community occupational therapy settings.
Prerequisites: Admitted to the OTA program.

4601 Fundamentals of Crafts 0-2-1
A course on fundamental craft techniques for professional application. Topics include: ceramics, wood projects, needlework, basketry, leatherwork, and others.
Prerequisites: Admitted to the OTA program.

4610 Theory of Occupational Therapy 5-0-5
An introduction to the developmental process of human performance. Topics include: exploration of occupational tasks and roles from birth to death; instruction in age-appropriate balance of work, self-care, play/leisure; introduction to the impact of disease and function in human occupation; and development of the therapeutic use of self.
Prerequisites: OTA 4600 (minimum grade C).

4611 Occupational Therapy Concepts and Skills - Psychosocial 3-0-3
The role of occupational therapy in the treatment of adults in a mental health setting. Topics include: development of analysis and observational skills, use of self and group for therapeutic intervention, application of group process, documentation, communication, and interpersonal skills.
Prerequisites: OTA 4612, OTA 4622 (minimum grade C).

4612 Occupational Therapy Concepts and Skills-Infants and Children 3-0-3
The role of occupational therapy in the treatment of children with physical and/or psychological dysfunction. Topics include: normal development, developmental disabilities, the selection of functionally significant, age-appropriate treatment interventions, documentation skills, and the team approach.
Prerequisites: OTA 4610, OTA 4620 (minimum grade C).

4613 Occupational Therapy Concepts and Skills - Physical Disabilities 3-0-3
The role of occupational therapy in the treatment of adults with physical dysfunction including acute care and rehabilitation. Topics include: treatment techniques used for various diagnoses, treatment planning and implementation, and documentation skills. Emphasizes adolescence through adulthood.
Prerequisites: OTA 4611, OTA 4621 (minimum grade C).

4614 Occupational Therapy Concepts and Skills - Gerontology 3-0-3
The role of occupational therapy with the elderly population. Topics include: the aging process and function pertinent to the elderly. Students explore the role of the OT assistant in non-traditional settings.
Prerequisites: OTA 4613, OTA 4623 (minimum grade C).

4620 Techniques of Occupational Therapy 0-4-2
The use of crafts and activity as therapeutic modalities in treatment toward function. Topics include: the concepts of activity analysis and therapeutic adaptations, problem-solving, and critical thinking skills.
Prerequisites: OTA 4600 (minimum grade C).

4621 Occupational Therapy Media - Psychosocial 0-4-2
Therapeutic intervention for adults in a mental health setting. Topics include: development of leadership skills necessary for a group setting, applying group process and using purposeful activity and crafts as therapeutic tools, problem solving, and critical thinking skills. Emphasizes adolescence through adulthood.
Prerequisites: OTA 4622 (minimum grade C).

4622 Therapeutic Media-Infants and Children 0-4-2
Therapeutic intervention with infants and children. Topics include: using play as a therapeutic tool; evaluation of other occupational performance skills; adaptive equipment; therapeutic techniques for positioning, handling, and feeding; basic developmental screening; problem solving; and critical thinking skills.
Prerequisites: OTA 4620 (minimum grade C).

4623 Clinical Competencies for Occupational Therapy-Physical Disabilities 0-6-3
A course on therapeutic intervention for physically disabled adults in acute care and rehabilitation settings. Topics include: techniques for activities of daily living, therapeutic adaptations, adaptive/assistive equipment, problem solving, and critical thinking skills.
Prerequisites: OTA 4621 (minimum grade C).

4624 Therapeutic Media-Gerontology 0-4-2
Therapeutic media for adults and elderly in a variety of settings. Occupational therapy treatment approaches in non-traditional and emerging settings are explored. Topics also include physical dysfunction and aging.
Prerequisites: OTA 4623 (minimum grade C).
Corequisites: OTA 4614.

4625 Survey of Therapeutic Media for Occupational Therapy 0-6-3
A course on using crafts and activities, task analysis, and application in various clinical settings. Students develop group leadership skills.
Prerequisites: OTA 4624, OTA 4614 (minimum grade C for both).

4631 Occupational Therapy Fundamentals Practice 3-0-3
A course on professional concerns for the practicing Occupational Therapy Assistant. Topics include: licensure, liability, professionalism, continuing education, national registration, and promoting occupational therapy. Students prepare for Level 2 Field Work Experience.
Prerequisites: OTA 4614, OTA 4624 (minimum grade C).

4633 Kinesiology for Occupational Therapy 2-2-3
A study of the movement of body parts, stressing the relationship to rehabilitation therapy. Students must pass a practical competency requirement in assessment of range of motion and functional muscle grade in order to pass the course.
Prerequisites: OTA 4611, OTA 4621 (minimum grade C for both).

4636 Orthotics and Physical Agent Modalities 0-2-1
A course in orthotic positioning devices for the upper extremity and physical agent modalities. Topics include: fabrication, application, fitting, and training in the use of orthotic positioning devices; administration of superficial thermal and mechanical modalities to improve occupational performance including hot packs, cold modalities, paraffin, CPM, TENS, and FES.
Prerequisites: OTA 4611, OTA 4621 (minimum grade C).

4637 Occupational Therapy Terminology 1-0-1
A course on terminology, abbreviations, acronyms, and symbols associated with the practice of occupational therapy.
Prerequisites: None.
Corequisites: OTA 4600.

4638 Home Modification & Assistive Technology 1-2-2
An introduction to options for improving functional independence of clients. Topics include: adaptation, simple and complex technology options, and Universal Design.
Prerequisites: OTA 4613 (minimum grade C).

4651 Occupational Therapy Assisting Fieldwork 2 (Level I) 0-9-2
Directed observation and participation in a community occupational therapy setting.
Prerequisites: OTA 4612, OTA 4622, OTA 4652 (minimum grade C for all).

4652 Occupational Therapy Assisting Fieldwork 1 (Level I) 0-9-2
Directed observation and participation in a community occupational therapy setting. Students must provide proof of current certification in CPR and First Aid.
Prerequisites: OTA 4610, OTA 4620 (minimum grade C) or equivalent.

4653 Occupational Therapy Assisting Fieldwork 3 (Level I) 0-9-2
Directed observation and participation in a community occupational therapy setting. Students must provide proof of current certification in CPR and First Aid.
Prerequisites: OTA 4612, OTA 4622, OTA 4652 (minimum grade C).

4660 Occupational Therapy Assisting Fieldwork 4 (Level II) 0-40-6
A clinical practicum in occupational therapy settings. An eight-week period of full-time work experiences under the supervision of a registered occupational therapy practitioner provides the student with in-depth experience in delivering occupational therapy services to various ages and conditions.
Prerequisites: OTA 4653 (minimum grade C).

4661 Occupational Therapy Assisting Fieldwork 5 (Level II) 0-40-6
A clinical practicum in occupational therapy settings. An eight-week period of full-time work experiences under the supervision of a registered occupational therapy practitioner provides the student with in-depth experience in delivering occupational therapy services to various ages and conditions.
Prerequisites: OTA 4653 (minimum grade C).

4699 Special Studies - OTA Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

PAS Pastry Arts

2850 Baking Theory 1 3-0-3
An introduction to the baking and pastry industry. Topics include: the history of baking and its grass roots beginnings to its evolution into a modern technology; and the principles, ingredients, and formulas of basic flour confectionery production.
Prerequisites: None.
Corequisites: PAS 2860.

PAS Pastry Arts
PE Physical Education

2851 Baking Theory 2 **3-0-3**
An introduction to the theory of yeast. Topics include: yeast's properties as a biological leavening agent in dough; basic rich and lean doughs, their ingredients, and how they function with yeast; mixing methods; proofing systems; dough retardation; and baking equipment.
Prerequisites: PAS 2850, PAS 2860.
Corequisites: PAS 2861.

2853 Pastry Theory **3-0-3**
A course on making and decorating cakes and cookies. Topics include: selecting ingredients, mixing and make-up methods, using bases and mixes, decorating cakes and cookies, and fruit-based desserts.
Prerequisites: PAS 2851, PAS 2861.
Corequisites: PAS 2863.

2860 Basic Baking 1 **1-4-3**
A hands-on introduction to basic baking principles. Topics include: flour development, ingredient function, weighing and measuring procedures, and safe use of baking equipment. Students prepare quick breads, puff pastry, and various pies and tarts.
Prerequisites: None.
Corequisites: PAS 2850.

2861 Basic Baking 2 **1-4-3**
A hands-on introduction to yeast-raised dough production. Topics include: dough preparation, sweet roll dough, laminated yeast raised dough, fritters, and waffles. Students produce these items and explore convenience product usage in the baking and pastry industries.
Prerequisites: PAS 2850, PAS 2860.
Corequisites: PAS 2851.

2862 Nutritional Baking **1-3-2**
A hands-on course in which students produce quantity nutritional baked products. Topics include: nutritional significance of ingredients; and substitution of high fat, high carbohydrate, and high sodium ingredients. Students learn recipe modification techniques.
Prerequisites: PAS 2850, PAS 2860, DT 1202.

2863 Pastry Production **1-4-3**
A hands-on introduction to producing cakes, cookies, and fruit-based desserts. Topics include: formulas, make-up methods, finishing, and decorating. Students produce decorated cakes and cookies, tortes, gateaux, and petit fours.
Prerequisites: PAS 2851, PAS 2861.
Corequisites: PAS 2853.

2864 Introduction to Pastry Design **1-4-3**
A hands-on introduction to artistic design using pastry mediums. Topics include: using decorative pastry mediums such as marzipan, pastillage, chocolate, and bread molding. Students produce practice centerpieces.
Prerequisites: PAS 2851, PAS 2861.

2865 Advanced Pastry **1-4-3**
A study of fine pastry and cake production for buffet presentation. Topics include: advanced cake types and advanced decoration techniques such as stenciling and pattern screening. Students produce choux paste and puff pastry items.
Prerequisites: PAS 2853, PAS 2863, PAS 2864.
Corequisites: PAS 2866.

2866 Pastry Buffet and Design **1-4-3**
A study of pastry buffets and advanced design techniques. Topics include: pastry buffet set-up and service, display and decoration techniques, and classical dessert service. Students produce quality display centerpieces and a pastry buffet.
Prerequisites: PAS 2853, PAS 2863, PAS 2864.
Corequisites: PAS 2865.

2867 Restaurant Dessert Production **2-8-6**
A study of dessert production procedures and methods in a restaurant environment. Topics include: producing and presenting classical and modern gateaux, small fancies, plated cold desserts, and hot souffles; dining room set-up; and tableside dessert cookery.
Prerequisites: PAS 2865, PAS 2866.

2868 Introduction to Wedding Cake Design **1-4-3**
A study of wedding cake styles and models. Topics include: basic wedding cake make-up, construction, and decorating techniques. Each student produces and decorates a basic wedding cake.
Prerequisites: PAS 2869.

2869 Introduction to Celebration Cakes **1-4-3**
A study of celebration cakes including birthday, anniversary, and novelty cakes. Topics include: basic styles and make-up of special occasion cakes and decorating techniques such as figure piping and airbrushing. Students produce examples of the cakes.
Prerequisites: None.

2878 Advanced Wedding Cake Design **1-4-3**
A study of advanced wedding cake design and production. Topics include: intricate piping techniques, gum paste and sugar flowers, accelerated cake designing and wedding cake construction.
Prerequisites: PAS 2868.

PBA Pre-Business Administration

9228 Cooperative Education Pre-Business Administration **1-40-2**
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the PBA program, 2.0 minimum GPA.

9248 Cooperative Education Pre-Business Administration - Parallel **1-20-1**
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the PBA program, 2.0 minimum GPA.

PCC Personal Chef

3670 Personal Chef Principles **2-0-2**
A course that introduces students to the agenda of being a personal chef and the situations in which these skills can be applied. Students gain familiarity with the set-up, organization, and planning needed to pursue doing business in the personal chef occupation.
Prerequisites: None.

3671 Personal Chef Meal and Menu Planning **0-6-2**
A course that concentrates on instructing the personal chef in the development of menus, aspects of recipe modifications for diet-specific meal plans, and using nutritional software for individual clientele.
Prerequisites: DT 1202, CUL 3611, CUL 3602.

3672 Personal Chef Practices **0-6-2**
The capstone course for the Personal Chef Certificate program; combines the students' complete knowledge of researching and creating a diet, preparing and executing various menus, and offering a complete dietary service as a personal chef. Students display procedures learned in previous coursework.
Prerequisites: PCC 3671.

PE Physical Education

4030 Relaxation Techniques **0-2-1**
A course on techniques used to achieve the relaxation response. Topics include: relaxation techniques and their physiological effects.
Prerequisites: None.

4041 Advanced Basketball **0-2-1**
A course on advanced basketball shooting, passing, dribbling, and defensive skills. Students participate in breakdown drills to enhance skills and achieve individual improvement.
Prerequisites: PE 4067 (minimum grade C).

4042 Advanced Scuba Diving **1-3-2**
Advanced training includes classroom and pool instruction to advanced scuba certification. Open dives are required and are not included in the cost of the course. Dives can be arranged through the instructor. Equipment rental is the responsibility of the student.
Prerequisites: Open water diver certification.

4043 Meditation **0-2-1**
A foundation for developing a powerful meditation practice into daily lifestyle. Topics include: introduction to meditation, relaxation techniques, meditation teachings, and meditation practices.
Prerequisites: None.

4044 Spinning 0-2-1
An indoor cardiovascular cycling class on stationary bikes that is based on heart rate training in the five energy zones.
Prerequisites: None.

4045 Zumba
A course that provides a cardiovascular workout combining interval training, resistance training, and sculpting with Latin dance music.
Prerequisites: None.

4050 Pilates Mat Class 0-2-1
A course based on Joseph Pilates' concepts of body conditioning. Topics include: the effects of posture, flexibility, strength, and breathing techniques on increased body awareness and movement sense.
Prerequisites: None.

4051 Movement in Dance 0-2-1
A course on modern dance combining warm-up, stretch, and jazz combinations to attain flexibility and knowledge of jazz dance. The dance technique includes deep core strengthening.
Prerequisites: None.

4053 Intermediate Pilates 0-2-1
A course emphasizing movement mastery into a full program to redefine the body's powerhouse. A continuum builds on the principles of control, concentration, fluidity, precision, breath, imagination, and integration to take participants to the next level.
Prerequisites: PE 4050 (minimum grade C) or previous experience in Pilates class.

4054 Intermediate Yoga 0-2-1
A continuation of PE 4077. Building on basic principles, students explore more advanced postures. A fast-paced class to develop strength and flexibility in addition to greater cardiovascular endurance.
Prerequisites: PE 4077 (minimum grade C) or prior experience in a yoga class.

4055 Basic Swimming 0-2-1
A course for students having little or no previous swimming experience. Basic skills to meet requirements for the American Red Cross Learn-to-Swim courses I, II, III.
Prerequisites: Informed consent.

4056 Intermediate Swimming 0-2-1
A course on developing and refining basic swimming strokes. Topics include: strokes, turns, diving, and water safety skills. Meets the requirements for the American Red Cross Learn-to-Swim levels IV and V.
Prerequisites: Ability to swim 25 yards on stomach and back and swim in deep water, informed consent.

4057 Advanced Swimming 0-2-1
Topics include: all styles of swimming, endurance, board diving, speed skills, and safety skills. Meets the requirements for the American Red Cross Learn-to-Swim levels VI and VII.
Prerequisites: Deep water swimming ability and 500 yard continuous swim; informed consent.

4059 International Folk Dancing 0-2-1
Students learn to perform line and circle dances from a variety of regions and cultures, mostly drawn from the Balkan countries and the Middle East.
Prerequisites: None.

4060 Racquetball 0-2-1
A course for students with limited or no prior racquetball experience. Topics include: basic racquetball skills, drills, practice, and actual game play.
Prerequisites: None.

4062 Water Aerobics 0-2-1
A course in which students attain a level of fitness through a variety of resistive and aerobic activities performed in shallow water. No swimming ability is required.
Prerequisites: None.

4063 Aerobics 0-2-1
A course involving vigorous dance routines and basic exercise forms for cardiovascular conditioning.
Prerequisites: None.

4064 Soccer 0-2-1
A course on basic soccer skills. Topics include: techniques and concepts of soccer, rules, terminology, and individual improvement. For men and women.
Prerequisites: None.

4065 Golf 0-2-1
A course on basic golf skills. Topics include: techniques and concepts of golf, rules, terminology, and individual improvement. For men and women.
Prerequisites: None.

4066 Resistance and Cardiorespiratory Training 0-2-1
A course on techniques for building and retaining muscle mass. Topics include: techniques for cardiorespiratory training resulting in a workout for body sculpting, fitness, and good health. Students learn and practice basic exercise principles.
Prerequisites: None.

4067 Basketball 0-2-1
A course on fundamental skills and techniques of basketball. Topics include: dribbling, shooting, passing, team strategy, rules, terminology, and individual improvement. For men and women.
Prerequisites: None.

4068 Volleyball 0-2-1
A course on basic volleyball skills, techniques, concepts, and an appreciation of the sport as a lifetime activity. For men and women.
Prerequisites: None.

4069 Hiking the Local Trails 0-2-1
A course on hiking basics and safety. Topics include: trip planning, conditioning, minimizing environmental impact, safety precautions, and equipment needs. Activities include local area hikes, personal goal setting, and a related project.
Prerequisites: None.

4070 Advanced Hiking Skills 1-4-3
A continuation of PE 4069. Activities include: longer day hiking and backpacking situations, local area hikes, personal goal setting, a related project, and orienting using map and compass.
Prerequisites: None.

4071 Yin Yoga 0-2-1
A yoga class that uses long holds in passive postures with relaxed muscles. Topics include: activating deeper tissues, and practicing various poses with attention to spine, hips, and knees.
Prerequisites: None.

4075 Introduction to Disc Golf 0-2-1
An introduction to the sport of disc golf. Topics include: rules of the game, terminology, history of the sport, disc selection and performance, equipment, basic skills, skill development games, professional organizations, course location and layout, and tournament play.
Prerequisites: None.

4076 Advanced Golf 0-2-1
A continuation of PE 4065. Students drill and practice all facets of the golf game. Topics include: refining the golf swing and increasing power, distance, and accuracy.
Prerequisites: PE 4065 (minimum grade C) or program chair consent.

4077 Yoga 0-2-1
A course on yoga that combines deep breathing and stretching exercises to gain muscle tone and flexibility. Topics include: de-stressing the mind while energizing the body, and improving circulation, balance, concentration, and clarity of mind.
Prerequisites: None.

4078 Scuba Diving 1-3-2
A course on knowledge and skills needed for eligibility for YMCA certification in scuba diving. Topics include: physics and physiology of underwater environment, and classroom and pool sessions.
Prerequisites: Demonstrated ability to swim 200 yards, swim underwater for 25 feet on one breath, and ability to remain afloat for 10 minutes.

4081 Advanced Tai Chi 0-2-1
A continuation of PE 4180. Topics include: practice in refining skills and 24 Tai Chi techniques.
Prerequisites: PE 4180 (minimum grade C).

4099 Special Studies in Physical Education Var-Var-Var
Students participate in a special exercise program throughout the term. Course goals and objectives are determined by the individual instructor with permission of the dean.
Prerequisites: None.

PE Physical Education
PHY Physics

4179 Aikido **0-2-1**
A martial arts course emphasizing a non-aggressive approach to self defense without injury. Topics include: using the energy of an opponent to diffuse an attack with throws, joint locks, and pins.
Prerequisites: None.

4180 Tai Chi **0-2-1**
A course on moderate physical activity to improve flexibility, stamina, balance, and muscle tone. Stress reduction techniques include: gentle movements, breathing exercises, meditation, and mind quieting.
Prerequisites: None.

PHI Philosophy

1620 Critical Thinking **3-0-3**
An introduction to principles of philosophy. Topics include: developing thinking skills used to solve abstract and practical problems, and reviewing standard methods and terminology used to ask philosophical questions (i.e., logic).
Prerequisites: ENG 1001.

1621 Introduction to Philosophy **3-0-3**
An introduction to philosophical investigation, covering problems and methods of knowledge, reasoning, and morality. Includes survey and analysis of notable Western and Eastern philosophers and their concepts.
Prerequisites: ENG 1001.

1625 Ethics **3-0-3**
An introduction to philosophical principles of ethics and moral reasoning. Students develop understanding of how to apply ethics in practical situations. Emphasizes making practical decisions with ethical or moral implications using examples related to students' major field of study.
Prerequisites: ENG 1001.

1626 Social Ethics **3-0-3**
An introduction to philosophical moral reasoning and its application to contemporary social and cultural issues. Topics include: sexual intimacy and marriage, capital punishment, euthanasia, abortion, freedom of speech, racism and affirmative action, war, and terrorism.
Prerequisites: ENG 1001.

1628 Special Topics in Philosophy **Var-Var-Var**
Topics include: study and discussion of selected topics in philosophy. Content and emphasis may vary from term to term.
Prerequisites: ENG 1001.

1630 Comparative World Religions: Asia **3-0-3**
An introduction to the comparative study of major religions of Asia. Topics include: the historical development, cultural function, and religious traditions of Hinduism, Buddhism, Taoism, Confucianism, Jainism, Shinto, and Sikhism.
Prerequisites: ENG 1001.

1631 Comparative World Religions: Middle East **3-0-3**
An introduction to the comparative study of the major religions of the Middle East. Topics include: the historical development, cultural function, and religious traditions of indigenous religions, Judaism, Christianity, Islam, and new religious movements.
Prerequisites: ENG 1001.

1632 Introduction to the Old Testament **3-0-3**
A nonsectarian systematic survey of the Hebrew Bible or the Old Testament scriptures. Topics include: content, major themes, historical background, authorship, and literary forms of each book and recent biblical scholarship.
Prerequisites: ENG 1001.

1633 Introduction to the New Testament **3-0-3**
A nonsectarian systematic survey of the New Testament scriptures. Topics include: content, major themes, historical background, authorship, and literary forms of each book and recent biblical scholarship.
Prerequisites: ENG 1001.

PHY Physics

2221 Technical Physics 1 **2-3-3**
A course on electrical fundamentals primarily for students in the Aviation and Automotive Service Management programs. Topics include: basic electricity, circuit building analysis, VOM instruments, and the fundamentals of analog and digital electronics.
Prerequisites: MAT 1171 or appropriate placement test mathematics score.

2222 Technical Physics 2 **2-3-3**
An introductory course for students in the Aviation program. Topics include: the kinematics and dynamics of moving objects including rotational motion and machines, pressure, density, the hydraulic lift, and Bernoulli's Principle.
Prerequisites: MAT 1171.

2223 Technical Physics 3 **2-3-3**
A continuation of PHY 2222. Topics include: the structure of matter, heat, the laws of thermodynamics, energy conversion, heat engines, ideal gases, properties of waves, sound, electromagnetic waves, and geometrical optics.
Prerequisites: PHY 2222.

2224 Fire Service Physics **2-3-3**
A course on physics for students in the Fire Service program. Topics include: forces and torque, one- and two-dimensional kinematics and dynamics, work, energy, power, machines, fluid mechanics, temperature and thermal energy, heat transfer, gas laws, and laws of thermodynamics.
Prerequisites: DE 0024 or appropriate placement test score.

2244 Physics for Respiratory Care Technology **3-2-4**
A course exploring the physics applied to respiratory care settings. Topics include: work, energy, and machines; pressure, forces, volume, temperature, and density; ideal gases; and fundamentals of basic electricity including current, resistance, voltage, power, and safety.
Prerequisites: DE 0024 or appropriate math placement test score.
Corequisites: MAT 1105 or MAT 1151.

2245 Physics for DMS/Surgical Technology **3-2-4**
A course exploring the physics applied to surgical and diagnostic medical sonography settings. Students progress from physics fundamentals to basic pressure, waves, electricity, and finally to specialized topics.
Prerequisites: MAT 1105 or MAT 1151 (minimum grade C).

2270 Introduction to Physics **2-3-3**
An introductory course for students with limited exposure to physics. Topics include: fundamentals of physics, laboratory procedures, the controlled experiment, methods of measurement, data collection and analysis techniques, and interpreting experimental results.
Prerequisites: MAT 1162 or appropriate placement test mathematics score.

2291 Physics 1 (Algebra and Trigonometry Based) **3-2-4**
The first course in a four-course sequence for programs that require an algebra and trigonometry based approach. Topics include: measurement, vector quantities, motion on an incline, trajectory motion, acceleration and gravity, Newton's Laws of motion, friction forces, field forces, work, energy, power, and circular motion.
Prerequisites: PHY 2270 or MAT 1171 or appropriate placement test score.

2292 Physics 2 (Algebra and Trigonometry Based) **3-2-4**
The second course in a four-course sequence designed for programs that require an algebra and trigonometry based approach. Topics include: vector quantities; force addition by scaling and component methods; concurrent and non-concurrent equilibrium; impulse, momentum, and collisions; rotational motion; mechanical and thermal energy; specific heat capacity; latent heat; heat transfer methods; and ideal gas laws.
Prerequisites: PHY 2291 or PHY 2295.

2293 Physics 3 (Algebra and Trigonometry Based) **3-2-4**
The third course in a four-course sequence for programs that require an algebra and trigonometry based approach. Topics include: electromagnetic radiation, nature of light, refraction, geometrical optics, physical optics, spectra, color, photometry, and the basic forces in physics.
Prerequisites: PHY 2291.

2294 Modern Physics **4-2-5**
A calculus-based course on modern physics that follows either PHY 2293 or PHY 2297. Topics include: special theory of relativity and its modifications of classical physics, photoelectric and Compton effects, quantum mechanics, cosmology, and basic principles of atomic and nuclear physics.
Prerequisites: PHY 2293 or PHY 2297, MAT 1193 or MAT 1154.

2295 Physics 1 (Calculus-Based) **4-2-5**
A course on calculus-based college physics. Topics include: measurement, vector quantities, one- and two-dimensional kinematics and dynamics using Newton's Laws, circular motion, work, energy, power, impulse, momentum, and the conservation laws.
Prerequisites: None.
Corequisites: MAT 1154 or MAT 1193.

2296 Physics 2 (Calculus-Based) 4-2-5
A continuation of PHY 2295. Topics include: rotational kinematics and dynamics, oscillatory motion, gravity, fluid mechanics, waves, temperature and thermal energy, heat transfer, the gas laws, and the laws of thermodynamics.
Prerequisites: PHY 2295.

2297 Physics 3 (Calculus Based) 4-2-5
A continuation of PHY 2296. Topics include: electric fields and potentials including Gauss' Law, resistance,capacitance, inductance, DC and AC circuits including Kirchhoff's Laws, power and energy stored in fields, Ampere's Law, Faraday's Law, electromagnetic waves and radiation, the nature of light, geometrical and physical optics including interference and diffraction, and polarization.
Prerequisites: PHY 2296.

PN Practical Nursing

4933 Introduction to Practical Nursing 1-0-1
A course that provides an overview of the role of practical nursing in healthcare. Topics include: nursing history, legal ethical issues, professionalism, and medical terminology.
Prerequisites: Admitted to the PN technical sequence.
Corequisites: PN 4934.

4934 Nursing Pharmacology 3-0-3
Survey of clinical pharmacology and dosage calculations. Topics include: systems of measurement, medication administration, pharmaceutics, pharmacodynamics, pharmacokinetics, legal/ethical responsibilities, and basic drug classifications.
Prerequisites: Admitted to the PN technical sequence.
Corequisites: PN 4933.

4943 Foundations of Practical Nursing 1 7-0-7
Introduction to the nursing process. Topics include: basic human needs, health-illness continuum, care of the older adult, and infection control.
Prerequisites: PN 4933, PN 4934, PSY 1515 (minimum grade C for all).
Corequisites: PN 4944, BIO 4073.

4944 Foundations of Practical Nursing 1-Lab/Clinical 0-6-2
Integration of theory and skills in the lab and clinical environment. Topics include: data collection and infection control measures.
Prerequisites: PN 4933, PSY 1515, PN 4934 (minimum grade C for all).
Corequisites: PN 4943, BIO 4073.

4953 Foundations of Practical Nursing 2 8-0-8
A nursing process approach to evolving needs of individuals and families. Topics include: women's health, pregnancy, childbirth, postpartum and the newborn, grief, end of life, and nursing care of the integumentary system with applied anatomy and physiology.
Prerequisites: PN 4943 (minimum grade C), PN 4944.
Corequisites: PN 4954.

4954 Foundations of Practical Nursing 2-Lab/Clinical 0-9-3
Continued integration of theory and skills in the lab and clinical environment. Topics include: medication administration and techniques of medical and surgical asepsis.
Prerequisites: PN 4943 (minimum grade C), PN 4944.
Corequisites: PN 4953.

4963 Alterations in Health 1 5-0-5
Concepts of care for individuals of all ages with alterations in health. Topics include: nursing process approach to basic pediatric nursing and the hospitalized patient, body systems focusing on musculoskeletal and endocrine systems with applied anatomy and physiology.
Prerequisites: PN 4953 (minimum grade C), PN 4954.
Corequisites: PN 4964.

4964 Alterations in Health 1: Clinical 0-6-2
Integration of theory and skills for increasingly complex patients. Students provide a safe, effective care environment in acute care, community, and pediatric settings.
Prerequisites: PN 4953 (minimum grade C), PN 4954.
Corequisites: PN 4963.

4965 Alterations in Health 2 5-0-5
A continuation of PN 4963. Topics include: nursing process approach to body systems, focusing on the respiratory and cardiovascular systems with applied anatomy and physiology.
Prerequisites: PN 4963 (minimum grade C), PN 4964.
Corequisites: PN 4966.

4966 Alterations in Health 2: Clinical 0-6-2
A continuation of PN 4964. Students provide a safe, effective care environment in acute care, community, and pediatric settings.
Prerequisites: PN 4963 (minimum grade C), PN 4964.
Corequisites: PN 4965.

4971 Alterations in Health 3 11-0-11
A continuation of PN 4965. Topics include: nursing process approach to body systems focusing on sensory, nervous, genitourinary, lymphatic/immune systems with applied anatomy and physiology; digestive system and accessory organs; and introduction to mental health.
Prerequisites: PN 4965 (minimum grade C), PN 4966.
Corequisites: PN 4972.

4972 Alterations in Health 3: Clinical 0-5-2
A continuation of PN 4966. Students provide a safe, effective care environment to individuals in a variety of clinical settings.
Prerequisites: PN 4965 (minimum grade C), PN 4966.
Corequisites: PN 4971.

4973 Professional Issues in Practical Nursing 1-0-1
A course that prepares students to work as a practical nurse. Topics include: licensure, interviewing skills, legal and ethical issues, employment, continuing education, delegation, and supervision.
Prerequisites: PN 4971 (minimum grade C), PN 4972.
Corequisites: PN 4974.

4974 Role Transition in Practical Nursing 0-12-2
A capstone course that provides students the opportunity to transition from student to practical nurse role by applying nursing knowledge to managing diverse groups of patients. Achieving a minimum acceptable predetermined score on a national standardized nursing exam is required for successful completion of the course.
Prerequisites: PN 4971 (minimum grade C), PN 4972.
Corequisites: PN 4973.

4998 Special Topics in Practical Nursing Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

4999 Special Topics in Practical Nursing Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

POL Political Science

1530 Making Your Voice and Vote Count: Democracy in Action 3-0-3
An introduction to the role of citizens in a democracy. Topics include: participation in the electoral process, issues involving local and state government, how voters can make changes in their community, how to become involved beyond voting. Emphasis placed on practical activities relating to local issues.
Prerequisites: None.

1531 Introduction to American Government 1 3-0-3
A survey of the American political system at the national level. Topics include: the basis of democratic theory and principles, examination of the Constitution, issues of civil liberties, and citizen rights.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1532 Introduction to American Government 2 3-0-3
A survey of the American political system at the national level. Topics include: structure and function of the legislative, executive, and judicial branches; citizen participation; and interest groups.
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1533 Introduction to Comparative Governments and Political Systems 3-0-3
A survey of political systems and structures. Topics include: the relationship between political ideologies and governments; and comparing international examples of alternative structures of executive leadership, legislatures, bureaucracy, and judicial systems.
Prerequisites: POL 1531 or POL 1532.

PSC Physical Science
PSET Electrical Engineering Technology

PSC Physical Science

2264 Astronomy - The Solar System 3-2-4
A course on the history of astronomy and the instruments astronomers use. Topics include: making observations, planetary evolution, the solar system, and the nature of light. The course includes lectures, demonstrations, and lab experiments. Students need an understanding of algebra.
Prerequisites: DE 0024 or appropriate placement test scores.

2265 Astronomy - The Universe 3-2-4
A course on the universe beyond our solar system and the instruments used to observe it. Topics include: stellar evolution, the Sun, the Milky Way, galaxies, and other extragalactic objects. The course includes lectures, demonstrations, and lab experiments. Students need an understanding of algebra.
Prerequisites: DE 0024 or appropriate placement test scores.

2267 Energy 3-2-4
A course on the different types of energy available throughout history, concentrating on their physics and chemistry. Topics include: the efficiency, environmental impact, and cost associated with using different types of energy. Students need an understanding of algebra.
Prerequisites: DE 0024 or appropriate placement test scores.

2269 Hydrology and Meteorology 3-2-4
A course on the hydrology and meteorology of the Earth. Topics include: the evolution of the Earth's oceans and streams, the evolution and physics of the atmosphere, and a study of environmental and climatic changes. Includes lectures, demonstrations, and lab experiments. Students need an understanding of algebra.
Prerequisites: DE 0024 or appropriate placement test scores.

2277 Geology 3-2-4
A course on the evolution of the Earth from a historical and physical perspective. Topics include: the internal and surface mechanisms shaping the Earth's interior and surface and a study of rocks, minerals, and fossils. Students need an understanding of algebra.
Prerequisites: DE 0024 or appropriate placement test scores.

2299 Special Studies: Science Var-Var-Var
A personal academic pursuit related to the student's technical field of study mutually agreed upon by the student and supervising faculty member. The Dean of Humanities and Sciences must approve the plan of study prior to registration.
Prerequisites: None.

6699 Technical Laboratory Problems Var-Var-Var
Special problems, projects, seminars, and individual study assignments pertinent to technical laboratory areas. Arranged with approval of coordinator and Dean of Humanities and Sciences.
Prerequisites: None.

PSET Electrical Engineering Technology

7717 Introduction to Smart Grid 2-3-3
A course on the fundamentals of the smart grid and traditional electric grid. Topics include: smart grid and electric grid delivery from points of generation to consumers via communication technology, the transmission system, and the distribution system.
Prerequisites: PSET 7737.

7718 Introduction to the National Electric Code (NEC) 1-3-2
An overview of the National Electric Code, National Fire Protection Association Standard 70E. Topics include: purpose, intent, enforcement, and use of the NEC in electrical design, and specification of equipment and hardware used in facility power systems.
Prerequisites: EET 7710, EET 7711.

7737 Introduction to Power Systems 2-3-3
An introduction to commercial, industrial, and residential AC power systems. Topics include: power grid overview, generation, transmission, distribution, equipment utilization, potential career opportunities, and issues and challenges facing the power industry today.
Prerequisites: EET 7710, EET 7711.

7739 Introduction to Stationary Engineering 3-2-4
An introductory course on steam plant operation and maintenance. Topics include: basic components of steam plant operation, maintenance requirements of these components, utility boilers for electrical power, combined cycle and cogeneration systems, nuclear steam generation, and standard pressure and horsepower calculations.
Prerequisites: None.

7747 Power Systems Design 1 3-3-4
The first of two courses focusing on the design of branch and feeder circuits in commercial, industrial, and residential facilities utilizing the National Electric Code. Topics include: developing load projections/calculations, sizing conductors, conduits, protective devices, transformers, switches for single and three phase loads, and equipment choices based on design requirements.
Prerequisites: EET 7720, EET 7721, PSET 7771.

7752 Electrical Transmission and Distribution 3-3-4
A course on the components of overhead and underground transmission and distribution systems. Topics include: operation, maintenance, and monitoring of transmission and distribution equipment, design of conductor support structures, and the use of data/information collection mechanisms.
Prerequisites: PSET 7737.

7757 Power Systems Design 2 4-3-5
A continuation of PSET 7747, focusing on the design of power systems from the service entrance to the load and topics of concern endemic to power systems analysis. Topics include: short circuit/fault analysis, coordination, lighting protection, emergency power systems, and hazardous locations.
Prerequisites: PSET 7747.
Corequisites: None.

7767 Power System Software Applications 3-3-4
In this project/capstone course, students use power engineering software to design a facility power system and lay out a utility transmission and distribution system to serve multiple loads including short circuit and fault coordination analysis.
Prerequisites: PSET 7757.
Corequisites: None.

7768 Smart Grid 1: Distribution System 3-3-4
A course on the fundamentals of the smart grid distribution system. Topics include: local area networks that use distributed energy resources to serve local loads and/or to meet specific application requirements for remote power, village or district power, premium power, and critical loads.
Prerequisites: EET 7720, EET 7721, EET 7738, PSET 7717.

7769 Smart Grid 2: Transmission System 0-6-3
A course on smart grid fundamentals. Topics include: transmission system technologies such as smart fault-interupters that control delivery of electricity from power plants to distribution substations.
Prerequisites: PSET 7768.

7770 Smart Grid Distributed Power Project 0-6-3
A project-based course in which students participate in a team design project. Topics include: remote and digital communications, renewable energy grid interface, smart metering, cost analysis, and system integration.
Prerequisites: PSET 7768.

7771 Wiring, Cables, and Connectors 2-3-3
An in-depth examination of wires, cables, and connectors used in commercial, industrial, and residential power systems. Topics include: selecting, sizing, determining insulation type, testing, and maintaining conductors and associated connectors used for power transmission and distribution.
Prerequisites: PSET 7718, PSET 7737.

7790 Power System Career and Assessment Seminar 0-2-1
A course on common licensing requirements, employee test requirements, and continuing education possibilities. Students take sample examinations including Residential/Maintenance Electrician Exam, Journeyman Electrician Exam, Master Electrician Exam, and Power Plant Maintenance and Operation (MOSS/PASS) tests.
Prerequisites: PSET 7757.

7791 Instrumentation and Controls 2-3-3
A course on instruments and controls in an electric generating power station. Topics include: sensors and actuators, control processes, distributed control system, programmable logic controls, and computer-based hardware and software.
Prerequisites: PSET 7757.

7915 Electrical Safe Work Practices 0-2-1
An in-depth review of OSHA requirements governing electrical safe work practices at manufacturing and service facilities. Topics include: the requirements outlined in OSHA 29 CFR Part 1910 and NFPA Standard 70E. Students receive OSHA 10 certification. This course is required for eligibility for co-op in Power Systems Engineering Technology.
Prerequisites: None.

PSY Psychology

1502 Human Relations-Applied Psychology 3-0-3
A course on applying psychological principles to everyday life. These applications help students understand themselves better, change their behaviors, and enhance their relationships.
Prerequisites: None.

1503 Psychology of Deafness 3-0-3
A course on the psychological issues of hearing impaired persons. Topics include: personality issues, social adjustment issues, and family dynamics.
Prerequisites: None.

1504 Psychology of Stress Management 3-0-3
A study of stress and stress management. Topics include: sources, types, and causes and consequences of stress; biology of stress; responses to stress; and strategies for managing stress. Emphasis is placed on self-assessment and practical application.
Prerequisites: None.

1505 Introduction to Psychology 1 3-0-3
A study of psychology as the scientific study of behavior and mental processes. Topics include: history, research methods, the biology of behavior, consciousness, sensation/perception, learning, and cognition (memory, thought, and language).
Prerequisites: DE 0005, DE 0011 or appropriate placement test scores.

1506 Introduction to Psychology 2 3-0-3
A continuation of PSY 1505. Topics include: personality, psychological disorders, therapies, development, and social psychology.
Prerequisites: PSY 1505 or equivalent.

1507 Abnormal Psychology 3-0-3
A survey of behavioral, emotional, and mental disorders. Topics include: identification, diagnosis, classification, and treatment utilizing the concepts of the DSM-IV-R; past and present views of abnormal behavior; role of medical/psychiatric community; research; and prevention.
Prerequisites: PSY 1506.

1508 Child Development 3-0-3
A course on the child's life beginning with genetic and environmental influences. Topics include: the physical, intellectual, language, social, moral, and abnormal growth of the child.
Prerequisites: PSY 1506.

1509 Adult Development 3-0-3
A course on the principles and theories governing human growth and development from early adulthood through late adulthood. Topics include: a comparison of the major contemporary theories, career selection and development, marriage, parenting, mid-life crises, retirement, and death and dying.
Prerequisites: PSY 1506.

1510 Adolescent Development 3-0-3
A course on the developmental issues of adolescence. Topics include: self concept, gender roles and identity, hazards such as alcohol and drug abuse, relating to parents and peers, achieving independence, value formation, and choosing and preparing for an occupation.
Prerequisites: PSY 1506.

1511 Social Psychology 3-0-3
A study of the individual within the social environment. Topics include: understanding the social behavior of individuals in interactions with others, social interaction, social influence, perception, attraction, aggression, altruism, and influence.
Prerequisites: PSY 1506.

1515 Lifespan Development 3-0-3
A course that examines human development from the prenatal period through adulthood. Topics include biological, cognitive, social, environmental, and cultural factors affecting humans, major developmental periods of life, and the practical application of theories and research.
Prerequisites: DE 0011 and DE 0005 or appropriate placement test score.

RE Real Estate

2931 Introduction to Property Management 3-0-3
A course on the property management profession and property types. Topics include: economics, planning, owner relations, marketing, lease administration and negotiations, tenant relations, maintenance and construction management, office procedures, life safety, and environment management. Practical guidelines for managing residential real estate at the on-site level are presented including personnel and resident policies, accounting, budgeting, legal aspects, and leasing.
Prerequisites: None.

2932 Residential Property Management 3-0-3
Students learn practical methods for successful management of property. Topics include: planning, systems and philosophies, personnel and resident policies, accounting and budgeting, legal aspects, insurance, marketing, leasing, sales, maintenance, and energy conservation.
Prerequisites: None.

2933 Foundations in Commercial Real Estate Management 3-0-3
Techniques for successful management of commercial real estate covering the broad topics of administration and management, building systems and operations, budgeting, accounting and reporting, and contract administration. Building tours are included to reinforce learning and see best-in-class examples of area properties.
Prerequisites: None.

2951 Real Estate Principles & Practices 4-0-4
An introduction to real estate economics. Topics include: principles of contracts, civil rights, ethics, financing, brokerage, appraisal, and Ohio practices. This course is required by the State of Ohio prior to taking the sales license exam.
Prerequisites: None.

2953 Real Estate Law 4-0-4
A course on law of agency as applied to real estate. Topics include: law of fixtures; estates including leases, conveyancing of real estate, the sales contract, the mortgage, deeds, recording, real estate brokers and managers; license laws of Ohio; civil rights; housing discrimination; desegregation; zoning; cooperatives; and condominiums. Required by the State of Ohio prior to taking the sales license exam.
Prerequisites: None.

2954 Real Estate Finance and Appraisal 4-0-4
A course on methodology of financing and appraising residential property. Topics include: types of Ohio lenders; types of conventional and government financing (FHA/VA); the loan process including qualifying the buyer and property, loan application, documentation, underwriting, closing, servicing, and possible foreclosure; and applicable state and federal regulations. Appraisal topics include: theory of appraisal techniques; and basic approaches of appraising: market comparison, cost of replacement, and income capitalization. Required by the State of Ohio prior to taking the sales license exam.
Prerequisites: None.

2956 Appraising Income Properties 3-0-3
Topics include: comprehensive analysis of theory and practical application of preparing an appraisal on investment property, appraisal techniques unique in the area of income producing properties. Students complete a term case study project that provides practical experience in using the income approach.
Prerequisites: RE 2954.

2958 Real Estate Investing 3-0-3
A course on techniques and strategies for profiting from investments in residential, office, warehouse, and industrial real estate.
Prerequisites: None.

2959 Advanced Income and Appraisal Standards 3-0-3
A course on mathematical problems in analyzing data to arrive at value estimates for income-producing properties. Course outlines the uniform standards of professional practices of the Appraisal Standards Board of the Appraisal Foundation. This course is required prior to taking the State of Ohio Residential and General Appraisal Certification exam.
Prerequisites: RE 2956.

9229 Cooperative Education Real Estate/Property Management 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the RE program, 2.0 minimum GPA.

RE Real Estate
SCM Supply Chain Management

9249 Cooperative Education
Real Estate/Property Management - Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to the RE program, 2.0 minimum GPA.

RT Respiratory Care

4700 Health Care Edge-Respiratory Care 1-3-2
An overview of the profession of Respiratory Care. Topics include: principles and procedures used in the profession, test-taking skills in a professional course, professionalism skills, infection control, basic patient care skills, moving and positioning patients, ethics, gerontology, medical records, bloodborne pathogens, HIPAA, vital signs, and death and dying.
Prerequisites: Admitted to the technical sequence of the Respiratory Care program.

4701 Respiratory Care Science 1 3-2-4
Topics include: physics; concepts of pressure, flow, and gas laws as they relate to the field of respiratory care; patient assessment; an introduction to common pulmonary diseases; and procedures, equipment, and assessment relating to oxygen therapy and humidity therapy.
Prerequisites: PHY 2244, BIO 4014, RT 4700; MAT 1151 or MAT 1105 (minimum grade C for all), 2.5 minimum GPA.
Corequisites: RT 4720.

4702 Respiratory Care Science 2 3-3-4
A continuation of RT 4701. Topics include: respiratory care procedures; assessment; use of equipment involved in aerosol therapy, hyperventilation therapy, chest physiotherapy, non-invasive monitoring, and other procedures related to routine care; and pharmacology applicable to the respiratory care patient.
Prerequisites: RT 4701, RT 4720, BIO 4015 (minimum grade C for all).
Corequisites: RT 4711.

4703 Respiratory Care Science 3 3-2-4
A continuation of RT 4702. Topics include: X-rays, infection control, positive pressure, non-invasive devices, airway management, manual resuscitators, oxygen analyzers, and hyperbaric oxygenation.
Prerequisites: RT 4702, RT 4711, BIO 4016, BIO 4009 (minimum grade C for all).
Corequisites: RT 4712, RT 4718.

4704 Respiratory Care Science 4 4-3-5
A continuation of RT 4703. Topics include: respiratory care of the critically ill patient including the assessment, equipment, monitoring, and care of the mechanically ventilated patient.
Prerequisites: RT 4703, RT 4712, RT 4718 (minimum grade C for all).
Corequisites: RT 4713, RT 4719.

4705 Respiratory Care Science 5 2-2-3
An in-depth study of neonatal development and neonatal and pediatric diseases and their treatments. Includes laboratory instruction on using pediatric/neonatal respiratory equipment and ventilator.
Prerequisites: RT 4704, RT 4713, RT 4719 (minimum grade C for all).

4706 Respiratory Care Science 6 5-0-5
A continuation of RT 4705. Topics include: hemodynamic monitoring and cardiopulmonary pharmacology of the critically ill patient, care of the trauma patient, and a review of principles of cardiopulmonary physiology.
Prerequisites: RT 4714, RT 4705 (minimum grade C for both).

4707 Respiratory Care Science 7 3-0-3
A continuation of RT 4706. In-depth study of specialized areas of respiratory care including: pulmonary rehabilitation, pulmonary function testing, and sleep studies. These areas are subject to change each year to correspond to the changing job description of the respiratory therapist.
Prerequisites: RT 4706, RT 4714 (minimum grade C for both).
Corequisites: RT 4715.

4711 Respiratory Care Clinical Practice 1 0-8-1
An introduction to respiratory care in the hospital environment. Topics include: practical application of oxygen delivery systems, aerosol therapy, incentive spirometry, patient positioning, and patient assessment.
Prerequisites: RT 4701, RT 4720 (minimum grade C for both).
Corequisites: RT 4702.

4712 Respiratory Care Clinical Practice 2 0-9-1
Topics include: practical application of IPPB, humidity, aerosol therapy, chest physiotherapy, and incentive spirometry.
Prerequisites: RT 4702, RT 4711, BIO 4016, BIO 4009 (minimum grade C for all).
Corequisites: RT 4703, RT 4718.

4713 Respiratory Care Clinical Practice 3 0-17-3
A continuation of RT 4712. Topics include: airway management, sterilizing equipment, introduction to ventilator care, and the operating room.
Prerequisites: RT 4703, RT 4712, RT 4718 (minimum grade C for all).
Corequisites: RT 4704, RT 4719.

4714 Respiratory Care Clinical Practice 4 0-22-4
A continuation of RT 4713. Topics include: all phases of respiratory care emphasizing care of patients requiring mechanical ventilation. Includes special rotations in pulmonary functions, equipment and pediatrics.
Prerequisites: RT 4713, RT 4719, RT 4704 (minimum grade C for all).

4715 Respiratory Care Clinical Practice 5 0-18-3
A continuation of RT 4714. Topics include: applying advanced respiratory care techniques emphasizing care of patients in the critical care setting. Includes specialized areas of practice and use of computerized clinical simulations.
Prerequisites: RT 4706, RT 4714 (minimum grade C for both).
Corequisites: RT 4707.

4716 Respiratory Care Clinical Practice 6 0-20-3
A continuation of RT 4715.
Prerequisites: RT 4707 (minimum grade C).

4718 Pulmonary Diseases 1 3-3-4
An in-depth study of pulmonary disease and pulmonary function. Topics include: the pathophysiology, diagnosis, and treatment of common respiratory diseases, and the pulmonary function tests and equipment used to diagnose these diseases.
Prerequisites: RT 4702, RT 4711, BIO 4016 (minimum grade C for all).
Corequisites: RT 4703, RT 4712.

4719 Pulmonary Diseases 2 3-0-3
A continuation of RT 4718. Topics include: diseases of the heart, trauma, and neurological conditions affecting the pulmonary system.
Prerequisites: RT 4718, RT 4703, RT 4712 (minimum grade C for all).
Corequisites: RT 4704, RT 4713.

4720 Cardiopulmonary Anatomy & Physiology 4-2-5
A course on detailed anatomy and physiology of the respiratory and circulatory systems. Emphasizes topics relevant to respiratory therapy: ventilation, diffusion, oxygen and carbon dioxide transport, red cell physiology, and acid-base balance.
Prerequisites: BIO 4014, admitted to Respiratory Care program, 2.5 minimum GPA.
Corequisites: RT 4701.

4723 Respiratory Care Seminar 2-2-3
A capstone course for Respiratory Care students. Topics include: a discussion of special issues pertaining to the field of respiratory care and preparation for the national credentialing exams.
Prerequisites: RT 4707 (minimum grade C).
Corequisites: RT 4716.

9376 Parallel Cooperative Education - Respiratory Care 1-20-1
Respiratory Care students participate in a part-time paid field learning experience while completing other program requirements. This experience provides an opportunity to apply knowledge and skills acquired in classes. Students must adhere to the Health and Public Safety Division Student Handbook and program requirements.
Prerequisites: Admitted to RC program, coordinator consent, 2.0 minimum GPA.

9386 Internship - Respiratory Care 1-20-1
Students participate in an unpaid field learning experience 16 to 20 hours per week. Students must adhere to the Health and Public Safety Division Student Handbook and program requirements.
Prerequisites: Admitted to RC program, coordinator consent, 2.0 minimum GPA.

SCM Supply Chain Management

1817 Purchasing 1 3-0-3
A course on the purchasing process. Topics include: supply chain organization, purchasing policy and procedures, insourcing/outsourcing, supplier evaluation and selection, and supplier quality management.
Prerequisites: None.

1818 Purchasing 2 **3-0-3**
A continuation of SCM 1817. Topics include: strategic cost management, negotiations, managing contracts, purchasing law and ethics, inventory systems, transportation services, and electronic commerce.
Prerequisites: SCM 1817.

1877 Supply Chain Management **3-0-3**
A course on maximizing return on investment by managing raw materials and finished inventory. Topics include: the interrelationship of obtaining materials, working on and storing product, order fulfillment, and customer delivery in both traditional and e-commerce environments.
Prerequisites: None.

2937 Fundamentals of Resource Planning **4-0-4**
An introductory course on the principles of effective resource planning. Topics include: the concepts of planning of resources at each level, from strategic to tactical. Students work together to solve problems, develop plans, build teams, and present solutions.
Prerequisites: SCM 1877.

2938 Fundamentals of Inventory Control **4-0-4**
A course on identifying and applying the basic principles of inventory management. Topics include: essential vocabulary and basic methods of planning and controlling inventory in manufacturing, institutional, distribution, and retail environments.
Prerequisites: None.

2939 Fundamentals of Manufacturing Control **4-0-4**
A course on executing production plans and master production schedules, reactions to capacity constraints, and maintaining individual order control. Topics include: dealing with priority and capacity management by using material requirements planning, capacity management, capacity requirements planning, production activity control, and Just-in-Time.
Prerequisites: SCM 2938.

2940 Operations Management **4-0-4**
A course on designing and operating systems to produce goods and services. Topics include: relationships within the company environment, particularly with marketing and product design; facilities planning; total quality management; cost analysis; project planning; and operations resource management.
Prerequisites: None.

SOC Sociology

1270 Introduction to Social Work **3-0-3**
An introduction to the social welfare institution and the field of social work. Topics include: a core of concepts, skills, and activities to prepare for the profession. Students obtain a beginning level of knowledge and value orientation to pursue a career in social work.
Prerequisites: SOC 1521.

1271 Social Welfare and Policies **3-0-3**
An introduction to the historical development and organization of social welfare policy including analyzing and evaluating policy effectiveness and impact on populations, particularly minorities.
Prerequisites: SOC 1270.

1272 Social Problems **3-0-3**
An overview and systematic study of major social problems in modern society using various sociological methods and theories. Topics include: ageism, poverty, urban life, racism, violence, and crime.
Prerequisites: SOC 1521.

1273 Drugs in Society **3-0-3**
An introduction to issues of use and abuse of drugs and alcohol in today's society. Topics include: prevention, early intervention, and treatment programs.
Prerequisites: None.

1520 Orientation to Deafness **3-0-3**
A course on the culture of the American Deaf community. Topics include: the education and legal status of the community and the philosophical and political forces affecting the hearing impaired.
Prerequisites: None.

1521 Introduction to Sociology 1 **3-0-3**
A course on sociology as a science occupied with classifying and defining group behavior including the basic institutions necessary to the processes of socialization and acculturation.
Prerequisites: DE 0005 and DE 0011 or appropriate placement test scores.

1523 Introduction to Sociology 2 **3-0-3**
A course on the five major social institutions in society: the family, religion, education, the economy, and government.
Prerequisites: SOC 1521.

1525 Changing Roles for Men and Women **3-0-3**
An interdisciplinary course on the processes through which sex roles develop. Topics include: the ways in which sex roles affect individuals and society and analysis of changing sex role patterns in the U.S. and elsewhere.
Prerequisites: Three hours of psychology or sociology.

1526 Sociology: Marriage and The Family **3-0-3**
A course on the social institutions of marriage and the family. Topics include: the historical perspective of marriage, male and female roles, society's impact on marital roles, and the impact of the family on the individual.
Prerequisites: SOC 1521.

1528 The African-American Family **3-0-3**
A course on issues confronting contemporary African-American families. Topics include: the realities, myths, structures, and dynamics that surround and affect today's African-American family; historical background; male/female and parent/child relationships; social, economic, health, and lifestyle issues; public policy issues; and the role of the church.
Prerequisites: ENG 1001.

1530 Race, Ethnicity, and Minorities **3-0-3**
A course on the social construction of subordinate/dominant relationships based upon race and ethnicity. Topics include: the effects of prejudice, discrimination, and cultural insensitivity on educational, political, and economic social structures.
Prerequisites: SOC 1523.

SPN Spanish

1076 Spanish Conversation and Composition **3-0-3**
A course emphasizing conversational and written Spanish. Students gain Spanish proficiency through interviews, discussion of articles, role-plays, communicative games, and watching and discussing Spanish television.
Prerequisites: SPN 1081 or spoken proficiency.

1077 Spanish 1 for Business and Finance **4-0-4**
Students learn and practice vocabulary for business, finance, and business travel.
Prerequisites: None.

1078 Spanish 2 for Business and Finance **4-0-4**
A continuation of SPN 1077. Students learn and practice vocabulary for business, finance, and business travel.
Prerequisites: SPN 1077.

1079 Spanish 3 for Business and Finance **4-0-4**
A continuation of SPN 1078. Students learn and practice vocabulary for business, finance, and business travel.
Prerequisites: SPN 1078.

1080 Elementary Spanish 1 **4-0-4**
An introduction to the Spanish language, providing a foundation for understanding, speaking, reading, and writing Spanish. Topics include: fundamentals of Spanish intonation, grammar, and syntax. Laboratory work may be required.
Prerequisites: None.

1081 Elementary Spanish 2 **4-0-4**
A continuation of SPN 1080, providing a foundation for understanding, speaking, reading, and writing Spanish. Topics include: fundamentals of Spanish intonation, grammar, and syntax; and advanced readings. Laboratory work may be required.
Prerequisites: SPN 1080 or one year high school Spanish or equivalent.

1082 Elementary Spanish 3 **4-0-4**
A continuation of SPN 1081, providing a foundation for understanding, speaking, reading, and writing Spanish. Topics include: fundamentals of Spanish intonation, more complex grammar, syntax, more advanced readings, and basic composition. Laboratory work may be required.
Prerequisites: SPN 1081 or two years high school Spanish or equivalent.

SPN Spanish
SSM Safety and Security Management

1083 Intermediate Spanish 1 4-0-4
Review and extension of basic principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and short literary pieces. Laboratory work may be required.
Prerequisites: SPN 1082 or three years high school Spanish or equivalent.

1084 Intermediate Spanish 2 4-0-4
A continuation of SPN 1083 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: SPN 1083 or equivalent.

1085 Intermediate Spanish 3 4-0-4
A continuation of SPN 1074 providing review and extension of principles of grammar and syntax through composition and conversation, stressing fluency. Topics include: more advanced reading, composition, and longer literary pieces. Laboratory work may be required.
Prerequisites: SPN 1084 or equivalent.

1090 Spanish for the Professions 3-0-3
A course that prepares non-Spanish speaking students to use Spanish language commands and phrases related to their specific careers and to understand cross-cultural issues related to interacting with native Spanish speakers. No prior knowledge of Spanish is necessary.
Prerequisites: None.

1098 Special Topics in Spanish Var-Var-Var
A course involving study and discussion of selected topics in Spanish. Content and emphasis may vary from term to term.
Prerequisites: None.

SSC Social Sciences

1598 Topics in Social Sciences Var-Var-Var
A study of selected topics in the social sciences, which may be drawn from one field within the social sciences or may be interdisciplinary. Content and emphasis vary from term to term.
Prerequisites: None.

SSM Safety and Security Management

1000 Disaster Preparedness for Health and Public Safety Workers 2-0-2
An introduction to disaster preparedness in the health and public safety workplace, as required by accrediting and licensing agencies. Topics include: types of disasters, emergency management preparedness, risks and hazards, role delineation, emergency response planning, communication, drills, and preparation in the workplace.
Prerequisites: None.

4001 Professionalism in Safety and Security Management 3-0-3
An introduction to concepts related to professionalism and security plan development in safety and security. Topics include: accountability, responsibility, work ethic, interpersonal skills, assessment of security strengths and weaknesses, and preparing a security plan.
Prerequisites: None.

4002 Legal Issues in Safety and Security Management 4-0-4
An introduction to legal issues in safety and security. Topics include: history of law in safety and security, regulation, compliance, Stafford Disaster Relief and Emergency Act, Emergency Management Assistance Compact, Grants Management Common Rule, and the Patriot Act.
Prerequisites: None.

4003 Introduction to Homeland Security Management 3-0-3
An introduction to the history of homeland defense. Topics include: civil defense, emergency preparedness, and traditional intelligence studies.
Prerequisites: None.

4004 Principles of Safety Management 4-0-4
An introduction to the field of safety management, emphasizing information and skills common to multiple fields and venues. Topics include: chemical safety information, Material Safety Data Sheets (MSDS), NFPA 704 Marking System, risk assessment, job hazard analysis, and project safety plans.
Prerequisites: SSM 4001 (minimum grade C).

4005 Introduction to Emergency Management 4-0-4
An introduction to the roles of public and private sector organizations in emergency preparedness and response. Topics include: National Incident Management System, FEMA, National Response Plan, right-to-know regulations, reporting, and emergency response plans.
Prerequisites: SSM 4001 (minimum grade C).

4010 Communications During Disaster Response 3-0-3
A course introducing the student to conducting communications during a crisis response. Topics include: effective communication during a crisis response, working with the media, and creating a positive message.
Prerequisites: None.

4011 Multi-Hazard Planning for Schools 3-0-3
An introduction to the moral and legal responsibilities in providing a safe and secure school environment. Topics include: identifying critical factors to successfully respond to multi-hazards, surviving and maintaining key school operations during emergencies, and developing a comprehensive school response plan.
Prerequisites: None.

4098 Special Studies Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

4099 Special Studies Var-Var-Var
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety. Students receive grades of S or U for this course.
Prerequisites: None.

4120 On-Scene Incident Management 3-0-3
At the completion of this course, the student will be eligible for certification in incident management. Topics include: FEMA-certified incident command, Unified Command and Area Command, and incident evaluations.
Prerequisites: None.

4121 Principles of Security Management 1 3-0-3
An introduction to the principles of security management. Topics include: communication, responsibilities, organizational structure and chain of command, projecting a professional image, IT security, and the protection of assets.
Prerequisites: None.

4122 Principles of Security Management 2 3-0-3
A continuation of SSM 4122. Topics include: threat mitigation, closed circuit television surveillance techniques, risk assessment, rules of evidence, investigative procedure, and guidelines for testifying in court.
Prerequisites: SSM 4121 (minimum grade C).

4123 Understanding Terrorist Groups 4-0-4
A survey of domestic and international terrorist groups active today. Topics include: historical origins of terrorist groups, ideology, and methodology.
Prerequisites: None.

4125 Defensive Tactics for Public Safety 4-0-4
A course on subject control systems used by law enforcement officers. Topics include: techniques for safely escorting suspects, balance displacement, break falls, pat-down procedures, safely restraining a suspect, joint manipulation techniques, and pressure points.
Prerequisites: None.

4126 Disaster Preparedness and Recovery 4-0-4
A course on effective disaster and recovery operations. Topics include: the nature of disasters, roles and responsibilities of local officials, human behavior during catastrophes, and vital functions during recovery operations.
Prerequisites: SSM 4005 (minimum grade C).

4130 Hazard Mitigation and Preparedness 4-0-4
A course on pre-disaster management activities at the local level. Topics include: vulnerability analysis, structural and nonstructural mitigation, capabilities assessment, and evaluation of preparedness plans.
Prerequisites: SSM 4005 (minimum grade C).

4132 Analytical Concepts for SSM 1 3-2-4
A continuation of SSM 4131. Topics include: collecting GIS data sets, manipulating data to produce mapping products, and applying mapping in public safety and related fields.
Prerequisites: SSM 4131 (minimum grade C).

4133 Analytical Concepts for SSM 2 3-2-4
A continuation of SSM 4132. Topics include: creating predictive models of behavior for disaster preparedness and law enforcement applications.
Prerequisites: SSM 4132 (minimum grade C).

4134 IT Network Security for SSM 4-0-4
A survey of issues and threats facing private sector information technology networks. Topics include: understanding external and internal threats, and relationships between physical security and information technology systems.
Prerequisites: None.

4201 Basic Health Care Security 4-0-4
Students prepare to take the International Association for Healthcare Security and Safety basic certification exam for the Healthcare Security Officer. Topics include: security as a service organization, crisis intervention, health care vulnerability, and disaster control and response in a health care setting.
Prerequisites: None.

4202 Advanced Health Care Security 4-0-4
Advanced training in health care security; prepares students to take the International Association of Healthcare Security and Safety exam for Advanced Training Certification. Topics include: crime prevention, investigative techniques, patient risk groups, and security in sensitive areas.
Prerequisites: SSM 4201 (minimum grade C).

4203 Health Care Security and Safety 3-0-3
A course on safety aspects of the health care environment. Topics include: health care safety programs, accidents and injuries, fire safety, and hazardous materials/waste management. Students prepare to take the IAHSS credentialing examination for Health and Safety Security Officers.
Prerequisites: SSM 4201 (minimum grade C).

4204 Health Care Security Supervision 3-0-3
Topics include: contemporary issues in health care, employee relations and appraisals, civil liability, budgeting, and professionalism. Students prepare to take the IAHSS Supervisor certification examination.
Prerequisites: SSM 4202 (minimum grade C).

4303 Banking and Corporate Security 3-0-3
An introduction to the basics of bank and corporate security. Topics include: alarm system design, access control, system integration, safes and vaults, and physical security tactics.
Prerequisites: None.

4304 Principles of Compliance and Ethics 3-0-3
Topics include: the Sarbanes Oxley Act of 2002, the Health Information Portability Assurance Act (HIPAA), federal sentencing guidelines, and codes of ethics.
Prerequisites: SSM 4122 (minimum grade C).

4402 Asset Protection and Loss 3-0-3
An introduction to the concepts of inventory shrinkage and basic loss prevention. Topics include: auditing, exception reporting, awareness training, investigation, business controls, and federal and state laws governing retail loss prevention.
Prerequisites: None.

4403 Personnel Security 3-0-3
Topics include: communication, management, organizational structure; security techniques; security controls; and local, state, and federal laws associated with personnel security.
Prerequisites: SSM 4121 (minimum grade C).

4404 Physical Plant Security Operations 3-0-3
Topics include: security and systems design in the physical plant; creating a security plan; physical plant system integration; reporting; and local, state, and federal laws governing security operations.
Prerequisites: SSM 4402, SSM 4122 (minimum grade C).

9100 Capstone Experience in SSM 3-0-3
Students work in teams, applying their skills to a real-life problem in a business environment. Activities include: critical analysis of problems; preparation of a safety or security plan; identification of access and vulnerability points within the systems; budget development; acquisition of materials, supplies, and resources; and execution of the plan.
Prerequisites: Instructor consent.

9200 Cooperative Education in SSM 1-20-1
Students participate in a paid field learning experience directly related to their academic discipline and SSM major. The course may be repeated for credit.
Prerequisites: Instructor consent.

9201 Cooperative Education in Safety and Security Management 1-40-2
Students participate in a paid field learning experience directly related to their academic discipline and SSM major. The course may be repeated for credit.
Prerequisites: Instructor consent.

9210 Internship in Safety and Security Management 1-20-1
Students participate in an unpaid field learning experience directly related to their major in SSM. The course may be repeated for credit.
Prerequisites: Instructor consent.

9211 Internship in Safety and Security Management-Full Time 1-40-2
Students participate in a full time unpaid field learning experience directly related to their major in SSM. The course may be repeated for credit.
Prerequisites: Instructor consent.

ST Surgical Technology

4500 Exploring the Surgical Technology Profession 2-0-2
An overview of the surgical technology profession. Topics include: history of surgical technology, introduction to the perioperative environment including surgical instrumentation, organizations that affect the ST professional, the role of a technician, employability skills and attributes for success in the ST profession, and legal terms related to the perioperative profession.
Prerequisites: MCH 4001.

4527 Fundamentals of Surgical Technology 1 5-0-5
An introduction to the perioperative environment. Topics include: concepts of care for the surgical patient, health and wellness, alternative treatment modalities, death and dying, the perioperative department including traffic patterns, infection control methods, and decontamination and reprocessing of patient care items.
Prerequisites: BIO 4014, PHY 2245 and ST 4500 (minimum grade C for all); 2.5 minimum GPA.

4528 Fundamentals of Surgical Technology 2 7-0-7
A course integrating the fundamentals of surgical technology. Topics include: asepsis and sterile technique; special equipment used in the operating room such as robotics, lasers, and endoscopes; sponges, needles, and sutures; surgical staplers, surgical instruments and counts; hemostasis and wound healing; operative drains; and specimens.
Prerequisites: BIO 4009, ST 4527 (minimum grade C for both).
Corequisites: ST 4541.

4529 General Surgery 1 7-0-7
A continuation of ST 4528 and an introduction to general surgery operative procedures. Topics include: general and regional anesthesia; abdominal incisions; operative steps of a laparotomy; abdominal wall hernia repairs; and accessory digestive organs procedures.
Prerequisites: ST 4528 (minimum grade C).
Corequisites: ST 4542.

4530 General Surgery 2 6-0-6
A continuation of ST 4529. Topics include: upper and lower gastrointestinal procedures, breast surgery, gynecological and obstetrical procedures, and plastic/reconstructive surgery.
Prerequisites: ST 4529 (minimum grade C).

4533 Surgical Specialties 1 5-0-5
A course on specialty surgical procedures. Topics include: introduction to ophthalmic, genitourinary, and orthopedic surgery.
Prerequisites: ST 4530 (minimum grade C).

4534 Surgical Specialties 2 5-0-5
A continuation of ST 4533. Topics include: introduction to neurosurgery procedures; pediatric procedures; head and neck procedures; and ear, nose, and throat surgery.
Prerequisites: ST 4533 (minimum grade C).

ST Surgical Technology

4535 Surgical Specialties 3 **5-0-5**
A continuation of ST 4534. Topics include: introduction to oral surgery (including maxillofacial operative procedures); and perivascular, thoracic, cardiac, and transplant surgery.
Prerequisites: ST 4534 (minimum grade C).

4538 Surgical Technology Seminar **3-0-3**
A comprehensive review of surgical technology.
Prerequisites: ST 4534 (minimum grade C).

4541 ST Surgery Lab **0-3-1**
A lab experience in which students integrate theory with skills in the operating room environment. Topics include: patient transportation and transfer, attachment of surgical bed accessories, patient positioning, operation of electrosurgery and suction and dispensing supplies to the sterile field.
Prerequisites: ST 4527 (minimum grade C).

4542 ST Clinical and Lab Integration 1 **1-6-3**
A course consisting of clinical and lab components, including a weekly seminar. Clinical topics include: performing beginning-level circulating skills on a surgical patient. On-campus lab topics include: skin preparation, urinary catheterization, surgical scrub, gowning, and gloving skills.
Prerequisites: ST 4528 (minimum grade C), ST 4541.

4543 ST Clinical and Lab Intregration 2 **0-7-3**
A course consisting of clinical and lab components. Clinical topics include: performing beginning level scrub skills learned in ST 4542. On-campus lab topics include: development of additional scrub skills to progress students into the scrub role.
Prerequisites: ST 4542.

4544 Introduction to Clinical Practice **0-6-2**
Students perform all previously learned scrub skills during assigned operative procedures at an affiliated hospital and practice instrumentation skills required for each step of the procedure. Employability skills of students are evaluated.
Prerequisites: ST 4543.

4551 ST Clinical Practice 1 **0-30-5**
Practical application of surgical skills at an assigned affiliate hospital. Students demonstrate basic competency in scrub skills relating to general and gynecological operative procedures. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: BIO 4018, ST 4533 (minimum grade C for both), ST 4544.

4552 ST Clinical Practice 2 **0-25-5**
A continuation of ST 4551, emphasizing specialty operative procedures. Students rotate, as needed, to another affiliate hospital for OB and pediatric experience. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: ST 4534 (minimum grade C), ST 4551.

4553 ST Clinical Practice 3 **0-25-5**
A continuation of ST 4552. Students must attend a one-hour weekly seminar on campus relating to the field experience. For satisfactory course completion, students must complete the NBSTSA certification examination.
Prerequisites: ST 4535 (minimum grade C), ST 4552.

4565 RN First Assisting **9-0-9**
A course that prepares the registered nurse to assume the expanded role of the RN First Assistant. Topics include: the preoperative, intraoperative, and postoperative role of the RN First Assistant. The course is accepted by the Certification Board Perioperative Nursing (CBPN).
Prerequisites: RN, two years experience in perioperative nursing, CNOR or eligible.

4566 RN First Assisting Clinical **0-21-3**
A self-directed, individualized, supervised clinical practice. Students demonstrate manual and behavioral skills under the preceptorship of a surgeon at a student-selected clinical site.
Prerequisites: ST 4565 (minimum grade C).

4567 Certified Surgical Technologist First Assisting **9-0-9**
A course on the basic knowledge and skills required to assist surgeons intraoperatively. Topics include: asepsis, infection control, patient safety, surgical anatomy and procedures, the role of the first assistant, and intraoperative functions.
Prerequisites: ST certification.

4580 Central Service Technology 1 **5-0-5**
A course on technical functions of Central Service related to providing quality patient care items. Topics include: packaging materials; methods of sterilization; preparation of sterile solutions; quality assurance; and care, handling, and processing of surgical instruments and supplies.
Prerequisites: MCH 4806, ST 4590 (minimum grade C for both).
Corequisites: ST 4585.

4581 Central Service Technology 2 **5-0-5**
A continuation of ST 4580. Topics include: total quality management, risk management, case cart development, regulatory agencies, material management concepts, information technology, human relations, and trends in Central Service.
Prerequisites: ST 4580 (minimum grade C).
Corequisites: ST 4586.

4584 Introduction to Central Service Clinical Practice **1-10-2**
An introduction to the Central Service environment at an affiliate hospital. Students integrate technical skills with didactic concepts. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: None.
Corequisites: ST 4590.

4585 Central Service Clinical Practice 1 **1-15-3**
Students rotate through the functional areas of a Central Service department and gain additional technical skills with a focus on quality patient services. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: ST 4584 (minimum grade C).

4586 Central Service Clinical Practice 2 **1-15-3**
A continuation of ST 4585. Students continue to perform highly technical functions in each area of a Central Service department. Students must attend a one-hour weekly seminar on campus relating to the field experience.
Prerequisites: ST 4585 (minimum grade C).

4590 Introduction to Central Service **5-0-5**
An introduction to the field of Central Service and its role in the hospital environment. Topics include: microbiology and infection control applicable to the Central Service discipline, decontamination procedures, disinfection, and anatomy and physiology.
Prerequisites: DE 0011, DE 0018 or appropriate placement test scores.
Corequisites: MCH 4806.

4592 Principles of Material Management in Health Care **3-0-3**
An introductory course on material management operations in today's health care environment. Topics include: organizational structure, inventory management, systems operation, purchasing, distribution, procurement, procedures, and product standardization.
Prerequisites: ST 4590 (minimum grade C) or program chair consent.

4593 Principles of Material Management in Health Care 2 **3-0-3**
A continuation of ST 4592. Topics include: purchasing and procurement procedures, total quality management, operational functions, financial management, and legal issues applicable to material.
Prerequisites: ST 4592 (minimum grade C).
Corequisites: ST 4580.

4594 Fundamentals of Operating Room Practice **3-2-4**
A course that provides nurses with a basic foundation for OR practice. In lab, students learn beginning level skills performed by the scrub and the circulation nurse.
Prerequisites: None.

4598 Special Studies - Surgical Technology **Var-Var-Var**
A student-initiated academic pursuit, mutually agreed upon by the student and faculty member and carried on outside the classroom. Before registration, the student must have the plan of study approved by a supervising faculty member and the Dean of Health and Public Safety.
Prerequisites: None.

STFA Surgical Technology - First Assistant

4570 Perioperative Biosciences 5-0-5
A course that expands knowledge of the perioperative biosciences. Topics include: advanced microbiology and pathology, surgical pharmacology, and anesthesia management.
Prerequisites: EMS 4735 and OT 1850 or MCH 4002 or keyboarding skill of 30 words per minute.
Corequisites: STFA 4571.

4571 Principles of First Assisting 2-4-4
An introduction to the knowledge and skills required for the role of the first assistant. Topics include: history; role of the first assistant in performing the preoperative, intraoperative and postoperative functions; career options; moral, ethical, and legal responsibilities; surgical interventions for specific patient goups; and complications of surgery and surgical emergencies.
Prerequisites: EMS 4735 and OT 1850 or MCH 4002 or keyboarding skill of 30 words per minute.
Corequisites: STFA 4570.

4572 Advanced Surgical Specialties 1 5-0-5
A course that augments knowledge and skills of the first assistant's role in a variety of surgical procedures. Topics include: general surgery procedures, endoscopic operative procedures, and gynecologic and obstetric surgical procedures.
Prerequisites: STFA 4570, STFA 4571 (minimum grade C for both).
Corequisites: STFA 4573.

4573 First Assisting Clinical 1 0-8-1
A self-directed, individualized, supervised clinical practicum with a focus on general surgery, and endoscopic, gynecological, or obstetrical surgical procedures. Students demonstrate manual and behavioral skills under the preceptorship of a surgeon at a clinical site chosen by the student.
Prerequisites: STFA 4570, STFA 4571 (minimum grade C for both).
Corequisites: STFA 4572.

4574 Advanced Surgical Specialties 2 5-0-5
A continuation of STFA 4572. Topics include: genitourinary surgical procedures, plastic/reconstructive surgery, ophthalmic, and otorhinolaryngologic surgical procedures.
Prerequisites: STFA 4572 (minimum grade C), STFA 4573.
Corequisites: STFA 4575.

4575 First Assisting Clinical 2 0-8-1
A continuation of STFA 4573. Students demonstrate manual and behavioral skills under the preceptorship of a surgeon at a clinical site chosen by the student. Students must complete the required number of procedures in any combination of the following surgical specialties: orthopedics, neurosurgery, pediatric, thoracic, perivascular, cardiac, genitourinary, plastic/reconstructive, ophthalmic, and oral maxillofacial.
Prerequisites: STFA 4572 (minimum grade C), STFA 4573.
Corequisites: STFA 4574.

4576 Advanced Surgical Specialties 3 5-0-5
A continuation of STFA 4574. Topics include: orthopedic and neurosurgical procedures.
Prerequisites: STFA 4574 (minimum grade C), STFA 4575.
Corequisites: STFA 4577.

4577 First Assisting Clinical 3 0-8-1
A continuation of STFA 4575. Students demonstrate manual and behavioral skills under the preceptorship of a surgeon at a clinical site chosen by the student. Students must complete the required number of procedures in any combination of the following surgical specialties: orthopedics, neurosurgery, pediatric, thoracic, perivascular, cardiac, genitourinary, plastic/reconstructive, ophthalmic, and oral maxillofacial.
Prerequisites: STFA 4574 (minimum grade C), STFA 4575.
Corequisites: STFA 4576.

4578 Advanced Surgical Specialties 4 5-0-5
A continuation of STFA 4576. Topics include: thoracic surgery, perivascular, and cardiac surgical procedures.
Prerequisites: STFA 4576 (minimum grade C), STFA 4577.
Corequisites: STFA 4579.

4579 First Assisting Clinical 4 0-8-1
A continuation of STFA 4577. Students demonstrate manual and behavioral skills under the preceptorship of a surgeon at a clinical site chosen by the student. Students must complete the required number of procedures in any combination of the following surgical specialties: orthopedics, neurosurgery, pediatric, thoracic, perivascular, cardiac, genitourinary, plastic/reconstructive, ophthalmic, and oral maxillofacial.
Prerequisites: STFA 4576 (minimum grade C), STFA 4577.

TBE HAZMAT, Rescue, and Safety

1001 Introduction to Rescue Physics and Incident Command System 2-0-2
A course on the basics of the Incident Command System in Rescue Operations. Topics include: incident command systems, rescue operations tactics, responder safety, and rescue physics.
Prerequisites: None.

1002 Line Rope Rescue Operations 2-2-3
A course on the use of basic rope rescue operations. Topics include: rope design and lift capability, anchors, rappelling, and vertical rescue techniques.
Prerequisites: None.

1003 Water and Ice Rescue Operation 2-2-3
A course on swift water rescue operations. Topics include: tactics of rescue swimming operations, water-rope operations, and boat operations.
Prerequisites: None.

1004 Permit-Required Confined Space Entry and Rescue 3-1-3
A course on entry and rescue operations pertaining to permit-required confined spaces. Topics include: confined space entry techniques, air monitoring, rescue equipment, and rescue techniques.
Prerequisites: None.
Corequisites: THZ 1005, TBE 1002.

1005 Search Operations 2-2-3
A course on search rescue operations based on FEMA requirements. Topics include: search operations tactics, map reading, land navigation, use of GPS, and search dogs.
Prerequisites: None.

1006 Trench Rescue Operations 2-2-3
A course on trench rescue operations as outlined in the NFPA standard. Topics include: trench safety, trench shoring, rescue equipment, and rescue techniques.
Prerequisites: None.

1007 Structure Collapse Rescue 2-2-3
A course on FEMA and NFPA structural collapse rescue standard. Topics include: building design, civil engineering principles, structural shoring, structural concrete, and rescue techniques.
Prerequisites: None.

1008 Vehicle Extrication Operations 2-1-2
A course on vehicle design and rescue techniques. Topics include: truck, car and bus; pneumatic and hydraulic equipment; structural shoring; and victim stabilization and extraction.
Prerequisites: None.

1009 Machinery Rescue Operations 2-1-2
A course on machinery rescue techniques involving victims trapped in machinery. Topics include: design and operations, crushed and amputations, victim extractions, and use of pneumatics and hydraulic rescue equipment.
pneumatic and hydraulic tools.
Prerequisites: None.

1010 Introduction to Incident and Crisis Management 3-0-3
A course on incident command for emergency services or safety professionals. Topics include: incident command operations, crisis leadership, HAZMAT and weapons of mass destruction operations, natural disaster response planning, National Incident Management System, and the National Response Plan.
Prerequisites: None.

TC Technical Communication

5001 Introduction to Multimedia Information Design Careers 2-0-2
An introduction to career requirements and options for various professions related to multimedia information design and industrial design. Topics include: career skills assessment; and directed research, reading, and writing to determine professional pathways and to understand employer expectations.
Prerequisites: None.

TC Technical Communication
TEM Industrial Maintenance

5005 Design Literacy 2-0-2
A course on historical trends in graphic design. Topics include: key developments and contributors, design language, and effective description of design concepts in written and spoken communication. Students must coregister for a designated section of ENG 1003.
Prerequisites: ENG 1002 (minimum grade C).
Corequisites: ENG 1003 (advisor-designated section).

5006 Writing Short Scripts - Audio and Video 2-0-2
A course on techniques for preparing professional radio and TV scripts for messages of 60 seconds or less. Topics include: audience analysis, copy platforms, and script formats. Students must coregister for a designated section of ENG 1003.
Prerequisites: MKT 2910, ENG 1002 (minimum grade C for both).
Corequisites: ENG 1003 (advisor-designated section).

5010 Visual Literacy 2-2-3
A study of visual elements that contribute to quality in print and multimedia communication. Topics include: creating, perceiving, and interpreting visual messages; and fundamental design principles applied to various types of publications and graphical user interfaces (GUIs).
Prerequisites: None.

5020 Usability Assessment 1 3-2-4
An introduction to principles and techniques of human factors analysis, information design, and usability assessment and testing. Students apply these principles to a variety of products with emphasis on Web sites.
Prerequisites: IT 5453 (minimum grade C).

5021 Usability Assessment 2 3-3-4
A continuation of TC 5020. Students prepare usability test materials, implement several types of usability tests, and prepare usability assessment reports for a variety of products, emphasizing Web-based products.
Prerequisites: TC 5020 (minimum grade C).

5032 Developing Instructional Materials 3-2-4
A course on developing instructional materials for print and multimedia distribution. Topics include: audience and task analysis, elements of instructional content, and effective product design. Fluency in computer-assisted publishing is recommended.
Prerequisites: ENG 1010 or ENG 1019 (minimum grade C for both).

5033 Developing Promotional Materials 3-2-4
A course on writing and designing promotional materials for print and Web distribution. Topics include: marketing communication principles, audience and product analysis, promotional writing styles and formats, and effective design of marketing materials. Fluency in computer-assisted publishing is recommended.
Prerequisites: ENG 1010 or ENG 1019, MKT 2901 (minimum grade C for all).

5034 Planning and Developing Proposals 3-2-4
A course on developing effective proposals for project funding. Topics include: strategy and research; interpreting requirements; and organizing, designing, and writing proposals. Word processing competency recommended. Degree-seeking students must successfully complete all English composition requirements before enrolling in this class.
Prerequisites: ENG 1010 or ENG 1019 (minimum grade C for both).

5035 Scriptwriting for Audio and Video: Short 2-3-3
A course on fundamentals of writing radio and television commercials and public service announcements. Topics include: developing concepts, analyzing audiences and products, preparing copy platforms and campaign plans, formatting scripts and storyboards, and delivering persuasive presentations of script concepts.
Prerequisites: MKT 2901 or MKT 2910, six credits of English composition (minimum grade C for all).

5036 Scriptwriting for Audio and Video: Long Form 2-3-3
A course on fundamentals of writing non-fiction informational and promotional scripts for radio, television, and digital video productions. Topics include: audience and client analysis; persuasive presentation of script concepts; and script and storyboard formats for news packages, short documentaries, training programs, and industrial/corporate programs.
Prerequisites: TC 5035 (minimum grade C).

5037 Writing and Designing Newsletters 2-2-3
A course on fundamentals of preparing newsletters. Topics include: journalism principles, writing news and feature stories, planning content, designing print and Web publications, and business and legal issues. Students must be able to use electronic publishing software.
Prerequisites: ENG 1001 or ENG 1018 (minimum grade C for both).

5041 Technical Editing Methods 1 2-2-3
A course on editorial concepts and techniques. Topics include: editor's role, editorial assessment process, levels of edit, proofreading, copy marking, stylebooks, and resource materials. Word processing, desktop publishing and basic Web site design competency recommended. Multimedia Information Design students must successfully complete all English composition requirements before enrolling.
Prerequisites: ENG 1010 or ENG 1019 (minimum grade C for both).

5042 Technical Editing Methods 2 2-2-3
A continuation of TC 5041. Topics include: expanding editorial roles and responsibilities, editing large and complex materials, and performing special editorial tasks.
Prerequisites: TC 5041 (minimum grade C).

5045 Writing for the Web 2-3-3
A course on fundamentals of preparing content for websites and web-supported publishing such as blogs and wikis. Topics include: analyzing site audience and purpose, creating and revising content, and applying best practices for Web document design. Some technical knowledge of website implementation is helpful.
Prerequisites: Six credits of English composition (minimum grade C for all).

5071 Technical & Professional Communication Capstone Project 3-3-4
Working in teams, students write or edit content for print, Web, and other media products for an external client. Activities include: audience, client, and market analysis; product design, planning, production, and testing; and project management. Students present project results to reviewers. Students who are unable to complete the course successfully may make one additional attempt.
Prerequisites: Completion of all other Technical & Professional Communication degree requirements with grades of C or higher.

5089 Technical Communication Seminar: Portfolio Presentation 2-3-3
A course in which students prepare a comprehensive professional portfolio documenting academic and work achievements. Students present portfolios to professional technical communicators for assessment.
Prerequisites: Successful completion of all other Technical Communication program requirements.

5098 Workshop in Technical Communication Var-Var-Var
Group study and discussion of selected topics in technical communication. Course content and emphasis may vary from year to year.
Prerequisites: None.

5099 Special Problems in Technical Communication Var-Var-Var
Individual studies and special projects pertaining to technical communication are assigned to students who are seeking advanced standing or implementing independent research or specialized technical communication projects. Enrollment requires prior approval of TC program chair and Dean of the Center for Innovative Technologies. May be repeated for credit.
Prerequisites: None.

TEM Industrial Maintenance

1010 Basics of Industrial Electricity 3-1-3
A course on basic electrical theory, devices, and applications. Hands-on lab exercises reinforce basic electric concepts and help develop safe electrical maintenance techniques.
Prerequisites: None.

1230 Electrical Ladder Diagrams 2-1-2
A course designed to develop the ability to interpret and construct electrical ladder diagrams. Extensive ladder logic labs are used to reinforce the application of ladder logic.
Prerequisites: None.

1240 Industrial Power Systems 1 2-1-2
A comprehensive study of modern power distribution systems including: basic design, installation, and troubleshooting.
Prerequisites: None.

1275 Motor Control Systems 3-2-4
A course for maintenance personnel involved in the selection, installation, and troubleshooting of industrial 480 three-phase motors and controls. Topics include: basic motors, basic control circuits/ladder logic, troubleshooting, two- and three-wire control, overload protection, jog/inch circuits, start-stop sequence, reversing circuits, and auxiliary control devices and interlocks.
Prerequisites: None.

1285 Sensors for Industrial Control Systems 2-1-2
A course for maintenance personnel concerning selection, installation, and troubleshooting of discrete and analog sensors commonly found in manufacturing operations. Topics include: limit switches, pressure switches, proximity switches, photo eye sensors, process sensors with analog outputs, and motion sensors.
Prerequisites: None.

1405 Installation of Solar Thermal Systems 2-2-3
A training course on solar thermal systems for individuals seeking to become installers of solar thermal systems. Topics include: solar thermal system fundamentals, design, installation, troubleshooting, and commissioning.
Prerequisites: None.

2010 Programmable Logic Controllers 1 3-1-3
A comprehensive course in PLCs designed by experts in the field of process control. Extensive labs using Allen Bradley SLC-500 and compact logic PLCs. Topics include: PLC operations, installation, basic programming, and troubleshooting.
Prerequisites: None.

2020 Programmable Logic Controllers 2 3-2-4
An extension of TEM 2010. This course is designed for electricians or instrument technicians who will be installing or troubleshooting advanced PLC controls. Course will go into advanced/special program instruction, data highways, PID control and remote I/O.
Prerequisites: None.

2110 Industrial Electrical Troubleshooting 3-2-4
A course teaching a systematic approach to troubleshooting that works. Extensive troubleshooting labs enhance the hands-on learning experience.
Prerequisites: None.

THE Theater

1670 Theater Appreciation 3-0-3
Study of theater as a mode of human expression. Topics include: developing awareness as an audience member; script analysis, acting styles, directing and design elements; and how these elements contribute to a successful production. Attendance at one live production during the term is required.
Prerequisites: None.

1671 History of the Theater 3-0-3
A course on the history of Western theater from classical antiquity through contemporary times that explores each period's contribution to modern theatrical practices. Course work includes regular written assignments and out-of-class screenings of plays from various periods.
Prerequisites: Six credits of English composition.

1672 Acting 1 3-0-3
The study of acting as a method of creative expression. Topics include: basic movement and vocal skills of the beginning actor, basic method for role preparation through script analysis, and theatrical vocabulary.
Prerequisites: None.

1673 Acting for the Camera 3-0-3
An introduction to film/video acting. Students learn techniques and terminology of the industry, study the work of master actors, and develop monologues and scenes with classmates to be recorded on video for study and auditions for the professional market.
Prerequisites: None.

1674 Childrens Theater for the Classroom 3-0-3
The practice of creating an original story, or adapting a story and presenting it as a performance. Topics include: tools for creating characters and setting, steps for classroom rehearsal techniques, and staging a production.
Prerequisites: None.

1675 Puppetry 3-0-3
The creation of puppet plays based on original stories. Topics include: learning to use shadow, hand, string, and full-body puppets.
Prerequisites: None.

1676 Improvisational Acting 3-0-3
A course in improvisational acting, focusing on quick response and teamwork to create an effective and entertaining result. Topics include: improvisational scene work, body movement, voice techniques, stage presence, and spontaneity.
Prerequisites: None.

1678 Special Topics in Theater Var-Var-Var
A course involving study and discussion of selected topics in theater. Content and emphasis may vary from term to term.
Prerequisites: None.

THZ HAZMAT, Rescue and Safety

1004 Hazardous (HAZWOPER) Material Technician Level (US EPA: Occasional Site Worker) 3-1-3
This training focuses on both defensive and offensive measures that stop and contain hazardous material (waste) spills and releases. Topics include USDOT Hazmat labeling, air monitoring, DECON operations, respiratory protections, and spill control. This course is designed to meet the OSHA, EPA, NFPA & DOT training requirements for individuals who handle or are exposed to hazardous substances.
Prerequisites: None.

1005 40-Hour HAZMAT Workshop 3-2-4
A course designed for personnel involved with the investigation and remediation of hazardous waste sites, and to a lesser extent, response to an accident involving hazardous materials. It provides the basic information needed to meet the requirements of 29 CFR 1910.120 and 29 CFR 1926.62 (Hazardous Waste Operations and Emergency Response), and NFPA Standard 471 and 40 CFR 311.
Prerequisites: None.

1010 Basic Hazardous Materials Chemistry 2-0-2
A basic chemistry course specifically designed to assist emergency services and safety professionals who manage or respond to a hazardous material (HAZMAT) event. Topics include: atomic structures, chemical elements, periodic table, chemical bonding, chemical reactions and, HAZMAT chemical terminology.
Prerequisites: None.

1020 Management Issues in Disaster Preparedness and Response 3-0-3
A course that provides the emergency services or safety professional an in-depth understanding of management issues during a disaster. Topics include: emergency response plans, risk assessment, crisis management teams, contingency planning, and continuity of operations.
Prerequisites: TBE 1010.

1030 Radiological and Biological Emergency Preparedness Planning 3-0-3
A course that provides the emergency services or safety professional in-depth understanding of radiological and biological incidents and their consequences. Topics include: radiological terminology, National Response Plan (NRP), biological threats, damage assessment, and containment protocols.
Prerequisites: TBE 1010.

1040 Introduction To Terrorism 3-0-3
A course designed to provide the Emergency Services or Safety Professional a basic understanding of terrorism and the terrorist. The course will also address the use of chemical, biological, radiological, nuclear, and explosives in a terrorist incident.
Prerequisites: None.

1041 Consequences of Terrorism 3-0-3
A course that provides emergency services or safety professionals a basic understanding of how terrorists plan and execute an attack. Topics include: history of terrorism, terrorist tactics and operations, case studies of terrorist attacks, and cultural and political awareness.
Prerequisites: TBE 1010.

1050 Disaster Forecasting and Modeling 2-2-3
A course designed to provide the emergency services or safety professional a basic understanding of the CAMEO systems. Topics include: CAMEO (Computer-Aided Management of Emergency Operations), GIS (Geographic Information Systems), and HAZMAT (Hazardous Material) Response Planning.
Prerequisites: None.

THZ HAZMAT, Rescue and Safety
TTT Environmental Health and Safety

1060 Media Relations in a Crisis 2-2-2
This introductory course provides a public and or private sector spokesperson or public affairs officer basic skills on media relations and operations during a crisis. Topics include: types of media, public information officer duties and responsibilities, press kits, media plans, and press briefings.
Prerequisites: None.

TMGT Management of Technology

2920 Technology Management Design Project 3-2-4
A capstone design project in which students work to resolve a variety of complex assignments.
Prerequisites: MGT 2966.

9218 Cooperative Education Technology Management 1-40-2
Students seeking an associate's degree participate in a paid field learning experience related to their degree program. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to program, 2.0 minimum GPA.

9219 Cooperative Education Technology Management - Parallel 1-20-1
Students seeking an associate's degree participate in a paid field learning experience related to their degree program for a minimum of 20 hours per week. Students must also register for academic course requirements during the same term. Students must adhere to cooperative education policies and procedures to earn credit. Course may be repeated.
Prerequisites: Admitted to program, 2.0 minimum GPA.

TOS HAZMAT, Rescue and Safety

1001 OSHA 10-Hour General Industry Safety & Health Training Course 1-0-1
This course is designed to provide an initial and basic overview of key OSHA General Industry Safety Standards. The course will provide only the basics on Occupational Safety. The course is designed for both the "worker" and novice safety professional.
Prerequisites: None.

1002 OSHA 30-Hour General Industry Safety & Health Training Course 3-0-3
This course is designed to provide the basic knowledge on how to develop an organization's safety program. In order to develop and administer a comprehensive safety program, it is critical for a safety professional or a member of management to know where to look and how to apply specific OSHA regulations that effect your organization.
Prerequisites: None.

1010 Permit-Required Confined Space Entry 1-1-1
A course designed to increase knowledge of hazards associated with permit-required confined space entry operations. Topics include: types of confined space, lockout-tagout requirement, air monitoring, and entry equipment.
Prerequisites: None.

1020 Fall Protection and Scaffolding Safety 1-1-1
A course on requirements governing safety at a construction work site. Topics include: OSHA 20 CFR 1926 Subpart L (Scaffold Safety) and Subpart M (Fall Protection), scaffold inspection techniques, and selection and use of fall protection equipment.
Prerequisites: None.

1021 Excavation Safety 1-1-1
A course on requirements governing excavation and trenching operations. Topics include: OSHA 29 CFR 1926 Subpart P (excavations), practical soil mechanics in relation to stability of shored and unshored slopes and walls of excavations, types of shoring (wood timbers and hydraulic), and solid testing methods.
Prerequisites: None.

1022 Work Zone Safety 1-0-1
A course on work zone safety. Topics include: design, construction, operations, maintenance, and the Manual on Uniform Traffic Control Devices.
Prerequisites: None.

1023 Hoisting and Material Handling Safety 2-2-3
A course on safety of hoisting and material handling operations. Topics include: the requirements outlined in OSHA 29 CFR 1926 Cranes and Material Handling.
Prerequisites: None.

1024 Electrical Safety 1-0-1
A course on requirements governing electrical safe work practices at construction sites. Topics include: OSHA 29 CFR Part 1926 and the National Fire Protection Standard 70 E.
Prerequisites: None.

1030 Safety Trainer 2-0-2
A course to train instructors in the methods used to teach employees safety practices. Topics include: basic teaching methods for adult learners regarding safety topics and skills at a job site.
Prerequisites: None.

TPI Industrial Maintenance

2110 Industrial Controls & Instrumentation 1: Introduction & Pressure Control 3-1-3
A course on basic concepts related to process controls and instrumentation. Topics include: controllers, transmitters, variable frequency drives (VFDs) and control valves, and automatic control techniques. Laboratory exercises include loop wiring, calibration, controller configuration, and troubleshooting.
Prerequisites: None.

2120 Industrial Controls & Instrumentation 2: Temperature 3-1-3
A continuation of TPI 2110. Topics include: control of temperature and pressure. Laboratory and computer simulations are used to deepen understanding of lecture topics.
Prerequisites: None.

2130 Industrial Controls & Instrumentation 3: Level & Flow 3-1-3
A continuation of TPI 2120. Topics include: control of level and flow, installation, calibration, configuration, and troubleshooting. Laboratory exercises are used to deepen understanding of lecture topics.
Prerequisites: None.

2140 Industrial Controls & Instrumentation 4: Final Control Elements 3-1-3
A continuation of TPI 2130. Topics include: industry use of final control units and how to select, install, configure, and troubleshoot pneumatic control valves and variable frequency drives (VFDs). Laboratory exercises are used to deepen understanding of lecture topics.
Prerequisites: None.

2150 Industrial Controls & Instrumentation 5: Analytical Control 3-1-3
A continuation of TPI 2140. Topics include: control of analytical and measurement processes such as ORP, pH, conductivity, and chromatography. Laboratory exercises deepen understanding of lecture topics.
Prerequisites: None.

TTT Environmental Health and Safety

1000 Nurse Aide Train-the-Trainer Program 3-0-3
A state-approved course that meets the requirements for nurses teaching either the classroom or clinical supervised parts of an approved Training and Competency Evaluation program for long-term care aides.
Prerequisites: RN or LPN with an active Ohio License and two years experience caring for the elderly.

Faculty & Staff Index

Faculty/Staff

Adisa, Dashik . . . . . **College Information Specialist,**
College Access Programs/Educational Opportunity Center
AA, AS, Cincinnati State Technical and Community College

Allen, Charalee, RD, LD . . . . . **Instructor,**
Business Technologies Division
BS, The Ohio State University
MEd, University of Cincinnati

Almager, Brigid . . . . . **Adjunct, Reference Librarian,**
Berry Library
BA, Rosary College
MALS, Rosary College

Armstrong, George, PS, PE . . . . . **Instructor,**
Center for Innovative Technologies
BSE, University of Cincinnati

Attenborough, Laura . . . . . **Instructor,**
Humanities Division
BA, Case Western Reserve University
MEd, Antioch University

Bacher, Susan, RN, CNOR, CRNFA . . . . . **Instructor,**
Health and Public Safety Division
BSN, Memphis State University
MSN, Saint Joseph's College of Maine

Baker, Yvonne, CPA . . . . . **Instructor,**
Business Technologies Division
BBA, Morehead State University
MS, Northern Kentucky University

Barnes, Thelma . . . . . **Library Specialist - Periodicals,**
Berry Library
BS, Alabama State University

Barnes-Bell, Athealia, RDH, EdD, ... **Academic Advisor,**
Enrollment and Student Development
AAS, RDH, Raymond Walters College
BSEd, MEd, EdD, University of Cincinnati

Barrett, Debra . . . . . **Instructor,**
Sciences Division
BS, Ohio University
MEd, Xavier University

Baskind, Marc A. . . . . . **Professor Emeritus,**
Business Technologies Division
BA, Washington University
MA, Indiana University

Batory, Susan, RN . . . . . **Instructor,**
Health and Public Safety
BSN, San Diego State University
MSN, University of Cincinnati

Batra, Prem N., PhD . . . . . **Professor Emeritus,**
Center for Innovative Technologies
MS, PhD, University of Cincinnati

Battistone, John . . . . . **Instructor,**
Humanities Division
BA, Rutgers College

Baylor, Robert, BA, MA . . . . . **Program Chair,**
Health and Public Safety Division
BA, University of Cincinnati
MA, Websters University

Beatty, Cheryl . . . . . **Instructor,**
Humanities Division
AAS, Sinclair Community College

Blatt, Sarajane, RN . . . . . **Instructor,**
Health and Public Safety
BSN, University of Cincinnati
MSN, Walden University

Bogenschutz, Debbie B. . . . **Coordinator, Information Services,**
Berry Library
AB, Thomas More College
MSLS, University of Kentucky
MA, Xavier University

Bonem, Stewart . . . . . **Professor Emeritus,**
Business Technologies Division
BA, MBA, Miami University

Bossard, Crystal . . . . . **Program Chair,**
Humanities Division
BA, College of Mount St. Joseph
MSW, University of Cincinnati

Bowling, Doug . . . . . **Associate Dean,**
Center for Innovative Technologies
BS, Wright State University
MS, University of Cincinnati

Boyle, Gary, LPCC . . . . . **Counselor,**
Enrollment and Student Development
BS, MA, University of Cincinnati

Bradley, Johnna . . . . . **Academic Advisor,**
Enrollment and Student Development
BS, Union College
MEd, Wright State University

Bronstrup, James . . . . . **Area Chair,**
Sciences Division
AAS, Cincinnati Technical College
AB, MEd, Xavier University

Brosz, Martha . . . . . **Program Chair,**
Center for Innovative Technologies
BS, College of Mt. St. Joseph

Brougham, Thomas . . . . . **Academic Advisor,**
Enrollment and Student Development
BS, University of Cincinnati
MEd, Xavier University

Brown, David M. . . . . . **Instructor,**
Humanities Division
BA, Miami University
MA, Utah State University

Brown, Isabel . . . . . **Academic Coach,**
College Access Programs/Student Support Services
BA, University of Cincinnati

Brown, Jesse C. . . . . . **Advisor,**
Office of Finanacial Aid
BA, University of Cincinnati

Brown, Richard . . . . . **Professor Emeritus,**
Business Technologies Division
BS, Franklin University
MEd, University of Cincinnati

Brown, Sharon S. . . . . . **Professor Emeritus,**
Business Technologies Division
BS, MEd, University of Cincinnati

Bryan, Dave . . . . . **Instructor,**
Health and Public Safety Division
BA, MA, Miami University

Burdsall, Lilly W. . . . . . **Culinary Operations Manager,**
Strategic Initiatives and Entrepreneurial Development
AAB, Cincinnati State Technical and Community College
BA, BS, University of Cincinnati

Burns, Mary, RNC . . . . . **Professor Emeritus,**
Health and Public Safety Division
BSN, D'Youville College
MSN, Boston University

Burns, Tom, PhD, PE . . . . . **Program Chair,**
Center for Innovative Technologies
BSCE, MSCE, University of Cincinnati
PhD, Indiana State University

Buschmann, Sandra . . . . . **Instructor,**
Humanities Division
BS, American International College
MEd (Reading Specialist), Xavier University
MEd (School Administration), Xavier University

Butler, Chuck . . . . . **Instructor,**
Business Technologies Division
AAS, Cincinnati State Technical and Community College

Buttelwerth, John W. . . . . . **.Instructor,**
Center for Innovative Technologies
BSCM, University of Cincinnati
MEd, Xavier University

Callahan, Patrick . . . . . **.Instructor,**
Center for Innovative Technologies
BSCS, University of Cincinnati

Callahan, Paul . . . . . **.Professor Emeritus,**
Business Technologies Division
BS, University of Cincinnati
MEd, Xavier University

Campbell, Connie L. . . . . . **.Professor Emeritus,**
Business Technologies Division
BS, Campbellsville University
MEd, University of Cincinnati

Canteel, Brian . . . . . **.Business Manager,**
Hazmat, Rescue and Safety,
Workforce Development Center
BS, State University of New York
MBA, Oklahoma City University
Graduate US Army Command College and General Staff

Carroll, Michael T. . . . . . **.Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College

Carson, Debra J., ... **.Program Chair,**
Health and Public Safety
Ed.D., University of Cincinnati
Registrations: R. EEG/EP T.

Caudill, Dawn . . . . . **.Program Chair,**
Humanities Division
BS, Cincinnati Bible College
Interpreter Certification,
Northeast Florida Educational Consortium
RID & NAD Certifications

Caudill, Jason . . . . . **.Program Chair,**
Center for Innovative Technologies
BA, Eastern Kentucky University
MS, East Tennessee State University
AWIC, Autodesk Maya

Cayse, Dan A., CPA . . . . . **.Vice President,**
Strategic Initiatives and Entrepreneurial Development
BS, MEd, University of Cincinnati

Chaney, Mike . . . . . **.Instructor,**
Health and Public Safety Division
AAS, Cincinnati State Technical and Community College
BAS, Northern Arizona University

Cheng, Andrea . . . . . **.Instructor,**
Humanities Division
BA, MS, Cornell University

Cherveny, Larry . . . . . **Business Manager,**
Industrial Maintenance and Green Technologies,
Workforce Development Center
BS, University of Cincinnati

Chikeleze, Michael C., JD . . . . . **.Acting Associate Dean,**
Business Technologies Division
BS, Enugu State University
MBA, JD, Washington University, St. Louis

Clark, Meg . . . . . **.Instructor,**
Business Technologies Division
BBA, University of Cincinnati
MBA, Xavier University

Clark, Rosemary V., RRA . . . . . **.Professor Emeritus,**
Health and Public Safety Division
BA, Edgecliff College
MA, Xavier University
RRA, St. Louis University

Coil, Robert, PhD . . . . . **.Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BM, MBA, University of Cincinnati
PhD, The Union Institute

Coleman, Piper, RN, ... **.Instructor,**
Health and Public Safety
BSN, Kent State University
MSN, Indiana University
MPH, Indiana University

Combs, Jean, RN . . . . . **.Instructor,**
Health and Public Safety
BSN, University of Cincinnati

Conroy, Brad . . . . . **.Library Specialist - Circulation,**
Berry Library
BA, University of Cincinnati

Corbin Christian, Temesha . . . . . **.Academic Advisor,**
Enrollment and Student Development
BA, Furman University
MEd, Miami University

Cotton, Wyatt D., PhD . . . . . **.Instructor,**
Sciences Division
BS, California State University at Los Angeles
PhD, University of California at Los Angeles

Cover, David W. . . . . . **.Coordinator of Disability Services,**
Enrollment and Student Development
BA, MHEd, Morehead State University

Craig, Ronald, PhD . . . . . **.Instructor,**
Humanities Division
BA, Cedarville College
MA, University of Dayton
PhD, The Ohio State University

Craigo, Robert W. . . . . . **.Dean Emeritus,**
Engineering Technologies Division
BS, West Virginia Institute of Technology
MS, University of Cincinnati

Crossley, Connie . . . . . **.Program Chair,**
Business Technologies Division
BS, BA, University of Cincinnati
MEd, University of Cincinnati

Cruz, Anthony . . . . . **.Dean,**
Enrollment and Student Development
BA, Florida International University
MPA, Florida State University

Curry, Janice, RNC . . . . . **.Instructor,**
Health and Public Safety Division
BSN, MSN, University of Cincinnati

Dadey, Donald . . . . . **.Professor Emeritus,**
Business Technologies Division
BS, MEd, University of Cincinnati

Daniels, Richard, EdD . . . . . **.Professor Emeritus,**
Enrollment and Student Development
AAS, Moberly Community College
BA, University of Missouri
MDiv, MEd, Southern Baptist Theological Seminary
EdD, University of Cincinnati

Dantzler, Wanda, RN, CNOR, CRCST . . . . . **.Program Chair,**
Health and Public Safety Division
BSN, University of Cincinnati
MEd, Xavier University

Davis, Paul, EdD . . . . . **.Instructor,**
Business Technologies Division
BA, MA, and EdD, University of Cincinnati

Davis, Sharon . . . . . **.Assistant Dean,**
Enrollment and Student Development
BS, MEd, Kent State University

Deacon, S. Mark . . . . . **.Program Chair,**
Business Technologies Division
BS, Eastern Kentucky University
MS, University of Kentucky

Decker, James, PS . . . . . **.Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BSCE, University of Cincinnati
Registered Professional Surveyor, State of Ohio

Dees, Sandra . . . . . **Academic Coach,**
College Access Programs/Student Support Services
BS, Wilberforce University
MSM, Indiana Wesleyan University

DeMark Beth, ... **Academic Advisor,**
Enrollment and Student Development
AA, Washington State Community College
BS, Ohio University
MEd, Ohio University

DeNu, Paul A., PS . . . . . **Dean,**
Center for Innovative Technologies
BSCE, University of Cincinnati
MSCE, Purdue University
Registered Professional Surveyor, State of Ohio

DeVore, Michael E., PE . . . . . **Program Chair,**
Center for Innovative Technologies
BSMET, University of Cincinnati
MBA, University of North Carolina at Greensboro

Dimmerling, Amy . . . . . **Instructor,**
Sciences Division
BS, MS, University of Cincinnati

DiPilla, Ray A. . . . . . **Professor Emeritus,**
Engineering Technologies Division
BSAE, Parks College of St. Louis University
MSAE, Air Force Institute of Technology

Dolan, Sue . . . . . **Co-op Coordinator,**
Center for Innovative Technologies
BS, Edgecliff College
MEd, Xavier University

Donohue, Florence, RN, CPNP . . . . . **Instructor,**
Health and Public Safety Division
BSN, Long Island University
MA, New York University
MSN, University of Cincinnati

Douglas, Karen . . . . . **Library Acquisitions Coordinator,**
Berry Library
BA, Denison University

Dunigan, Jane, LPC, MAC . . . . . **Business Manager,**
Professional, Managerial, Leadership, and Law Enforcement,
Workforce Development Center
BA, University of Cincinnati
MEd, Xavier University
Licensed Independent Chemical Dependency Counselor
Certified Criminal Justice Specialist

DuVall, Donna . . . . . **Associate Dean,**
Business Technologies Division
BA, MBE, Morehead State University

Ecker, Pamela S . . . . . **Program Chair,**
Center for Innovative Technologies
Instructor,
Humanities Division
BA, Hanover College
MA, Bowling Green State University

Eilers, Al . . . . . **Instructor,**
Business Technologies Division
BS, BSEd, MEd, University of Cincinnati
MBA, MHA, Xavier University

Elliott, Holly, RMA . . . . . **Program Chair,**
Health and Public Safety Division

Elmer, Robert V. . . . . . **Professor Emeritus,**
Business Technologies Division
BS, MEd, University of Cincinnati

Endres, Terence . . . . . **Writing Center Manager,**
Humanities Division
BA, University of Cincinnati

Erdmann, Terry . . . . . **Instructor,**
Sciences Division
BA, Ohio Northern University
MEd, University of Toledo

Eveslage, Robert W., RRT . . . . . **Program Chair,**
Health and Public Safety Division
BS, University of Cincinnati
MS, Indiana University

Ewing, Bari . . . . . **Director,**
College Access Programs
BA, Westhampton College, University of Richmond
MA, Bowling Green State University

Faessler, Judith, RN . . . . . **Instructor,**
Health and Public Safety Division
BSN, MSN, University of Cincinnati

Fallon, Ann . . . . . **Instructor,**
Center for Innovative Technologies
BS, University of Dayton
MS, University of Cincinnati

Feghali, Elias . . . . . **Instructor,**
Center for Innovative Technologies
BA in Secondary Education
College of Architectural Engineering,
Lebanese University, Beirut-Lebanon
Diploma in Architectural Engineering

Feist, Lawrence . . . . . **Program Chair,**
Center for Innovative Technologies
AAS, Cincinnati State Technical and Community College
BSEE, Wright State

Feld, Andrea . . . . . **Co-op Coordinator,**
Center for Innovative Technologies
BA, Indiana University

Fields, Kellee, M. MEd, MLT (ASCP), MLS . . . . . **Instructor,**
Health and Public Safety Division
AAS, Cincinnati State Technical and Community College
BA, MEd, Xavier University

Fraley, Charles Sean . . . . . **Instructor,**
Humanities Division
MA, University of Cincinnati
PhD, Union Institute and University

Freed, Kathleen . . . . . **Instructor,**
Business Technologies Division
BFA, College of Mount St. Joseph

Freeman, Scott . . . . . **Instructor,**
Sciences Division
BS, Massachusetts Institute of Technology
MS, University of Cincinnati

Freisen, Elvin . . . . . **Director,**
College Access Programs/Upward Bound Math and Science
BS, Goshen College
MEd, Xavier University
MAT, Miami University

Frey, Mary J. . . . . . **Instructor,**
Sciences Division
BA, Xavier University
MS, University of Cincinnati

Gache, Larry . . . . . **Instructor,**
Sciences Division
BSPE, Marietta College
MS, University of Cincinnati

Galvin, Meg . . . . . **Instructor,**
Business Technologies Division
Manager, Cincinnati State/UC Culinology
BA, Eastern Kentucky University
Graduate, Cordon Bleu, London, England
World Master Chefs Society
ACF Certified Executive Chef

Geers, Michele, CPA . . . . . **Program Chair,**
Business Technologies Division
BBA, University of Cincinnati

Gesell-Streeter, Carla . . . . . **Area Chair,**
Humanities Division
BA, Monmouth College
MA, Indiana State University

Glenn, Terrence J., EdD . . . . . **Vice President Emeritus,**
BS, MEd, Xavier University
EdD, University of Cincinnati

Gohn, A. Janelle, PhD, MT (ASCP), SM . . . . . **Program Chair,**
Health and Public Safety Division
BS, Indiana University
MA, College of Mt. St. Joseph
PhD, Miami University

Green, Marcus M. . . . . . **Professor Emeritus,**
Humanities Division
BS, MEd, University of Cincinnati

Greenlee, Debbie . . . . . **Tutoring Center Coordinator,**
Humanities Division
AAB, Cincinnati Technical College
BA, Xavier University

Gray, Darlene, ... **Academic Advisor,**
Enrollment and Student Development
AA, University of Cincinnati
BA, Miami University
MEd, Xavier University

Grogan, Thomas J., EdD **Instructor,**
Humanities and Sciences Divisions
BS, Xavier University
MA, The Ohio State University
MEd, EdD, University of Cincinnati

Grome, Noelle . . . . . **Co-op Coordinator,**
Center for Innovative Technologies
BS, Northern Kentucky University
MEd, Xavier University

Gunkel, Ann M., PhD . . . . . **Program Chair,**
Center for Innovative Technologies
AA, BA, Thomas More College
MS, Colorado State University
PhD, University of Cincinnati

Guntzelman, Sue, RN, BC, MSN . . . . . **Instructor,**
Health and Public Safety Division
Diploma, Good Samaritan (Dayton)
BSN, University of Cincinnati
MS, Wright State University

Hackworth, Jamilah . . . . . **Associate Dean,**
Health and Public Safety Division
BA, Kentucky State University
MSE, University of Dayton

Haensel, Angela . . . . . **Associate Dean,**
Humanities and Sciences Divisions
BA, Universidade PUC-RS, Brazil
MA, University of Missouri-Columbia

Haldeman, Joshua, IDSA . . . . . **Program Chair,**
Center for Innovative Technologies
BS, The Ohio State University

Hamon, Beth, RN . . . . . **Instructor,**
Health and Public Safety Division
BSN, Wright State University
MSN, Northern Kentucky University

Hancox, Jerelen, RN, FNP-BC . . . . . **Program Chair,**
Health and Public Safety Division
BSN, The Ohio State University
MSN, University of Cincinnati
Family Nurse Practitioner, Northern Kentucky University

Harrier, Peggy . . . . . **Acting Dean,**
Business Technologies Division
BA, St. Mary's College
MEd, Xavier University
Real Estate Broker, Ohio

Harper, Kelly . . . . . **Co-op Coordinator,**
Business Technologies Division
BA, MPA, Northern Kentucky University

Hartman, Elke M. . . . . . **Greenhouse Manager,**
AAB, Cincinnati State Technical and Community College
Associate Degree, Bensheim, Germany

Hatcher, Heather . . . . . **Instructor,**
Humanities Division
BA, State University of New York at Oswego
MA, PhD, University of Mississippi

Heck, Brenda, RN . . . . . **Instructor,**
Health and Public Safety Division
BSN, University of Cincinnati
AAS, MSN, University of Kentucky

Henderson, John L., EdD . . . . . **Interim President,**
BS Hampton University
MEd, EdD, University of Cincinnati

Hendrix, Richard . . . . . **Professor Emeritus,**
Business Technologies Division
BS, Bowling Green State University
MEd, Xavier University

Herking, Susan . . . . . **Instructor,**
Health and Public Safety Division
BS, University of Cincinnati
MEd, Xavier University

Hill, Katie M. . . . . . **Instructor,**
Business Technologies Division
BS, Morehead State University
MA, Morehead State University

Hils, Neal C. . . . . . **Professor Emeritus,**
Business Technologies Division
BS, University of Cincinnati

Hochmuth, Roberta, RN, CNE . . . . . **Instructor,**
Health and Public Safety Division
BSN, Capital University
MSN, University of Cincinnati

Hoctor, David . . . . . **Program Chair,**
Center for Innovative Technologies
BS, University of Illinois
MA, DePaul University

Hoeweler, Janice L . . . . . **Professor Emeritus,**
Sciences Division
BS, University of Illinois
MEd, Xavier University

Horan, Mary M. . . . . . **Assistant Director,**
College Access Programs/Connect2Success
BS, University of Cincinnati
MEd, University of Cincinnati

Horn, Laura, RD, LD, ... **Program Chair,**
Business Technologies Division
BS, Purdue University
MEd, University of Cincinnati

Horn, Scott . . . . . **Instructor,**
Sciences Division
BS, Eastern Kentucky University
MAT, University of Cincinnati

Howard, Anita . . . . .
Assistant Director, Veteran's Upward Bound,
College Access Programs/VUB
BSSW, The Ohio State University
MSSW, University of Cincinnati
LISW, State of Ohio

Howard, Nikki, RN . . . . . **Instructor,**
Health and Public Safety
BSN, University of Cincinnati

Howard, Destiny S. . . . . . **Advisor,**
Office of Financial Aid
BA, Xavier University
MA, University of Cincinnati

Howes, Mary Lee, ... **Professor Emeritus,**
Humanities Division
BA, Edgecliff College

Hubbard, John H., PE . . . . . **Professor Emeritus,**
Engineering Technologies Division
BSCE, Tufts University
MS, University of Pittsburgh

Hudson, Gregory . . . . . **Instructor,**
Humanities Division
BS, Xavier University
MA, University of Cincinnati

Huffman, Elodie, RD . . . . . **Professor Emeritus,**
Health and Public Safety Division
BS, Cornell University
MEd, University of Cincinnati
RD, Oklahoma State University

Huller, Patricia . . . . . **Instructor,**
Business Technologies Division
BS, University of Kentucky
MEd, Xavier University
ACFCC Certified Culinary Educator

Hunley, Marcha . . . . . **Honors Program Chair,**
Humanities Division
BSEd, MAIR, University of Cincinnati

Hying, Debra, RNC . . . . . **Instructor,**
Health and Public Safety Division
BSN, The Ohio State University
MSN, University of Cincinnati

Iacobucci, Frank A. . . . . . **Professor Emeritus,**
Sciences Division
BS, United States Military Academy
MEd, Xavier University

Jackson, Jennifer . . . . . **Instructor,**
Humanities Division
BA, Union Institute and University
MSW, University of Cincinnati

Jackson, Joan . . . . . **Professor Emeritus,**
Sciences Division
AB, DePauw University
MEd, Virginia Commonwealth University

Jakubovic, Robert . . . . . **Instructor,**
Humanities Division
BA, MA, Youngstown University

Johns, Julianna . . . . . **Instructor,**
Health and Public Safety
BA, ACT, College of Notre Dame of Maryland
MS, University of Cincinnati

Johnson, Joanne, RN . . . . . **Nursing Program Coordinator/ Assistant Director,**
Health and Public Safety Division
Diploma Good Samaritan Hospital
BSN, University of Cincinnati
MSN, University of Kentucky

Johnson, Viola . . . . . **Instructor,**
Business Technologies Division
BS, West Virginia Institute of Technology
MA, St. Thomas University

Jolicoeur, Jason . . . . . **Instructor,**
Humanities and Sciences Divisions
BS, MA Wichita State University
PhD, University of Missouri-St. Louis

Jones, Bonnie . . . . . **Operations Manager,**
Workforce Development Center
BS, University of Cincinnati

Jones, Dryden . . . . . **Business Manager, Health Business,**
Workforce Development Center
BA, Rollins College
MBA, Xavier University

Jones, Michael H. . . . . . **Professor Emeritus,**
Humanities Division
BFA, University of Cincinnati

Kantcheva, Stani, CPA . . . . . **Instructor,**
Business Technologies Division
Masters of Engineering, Technical University, Sofia, Bulgaria
Accounting Certificate, Cincinnati State
Technical and Community College

Kappesser, Mary, RN . . . . . **Program Director,**
Health and Public Safety Division
Good Samaritan Hospital School of Nursing

Kief, Cindy, COTA/L, ROH . . . . . **Academic Fieldwork Coordinator,**
Health and Public Safety Division
Certificate Columbus Adult Health Career Center
AAS, Cincinnati Technical College
BS, Clayton College of Natural Health
MS, Clayton College of Natural Health
ND, Clayton College of Natural Health

Killen, David . . . . . **Program Chair,**
Center for Innovative Technologies
BA, Wilmington College

King, Nancy . . . . . **Instructor,**
Humanities Division
BA, Sienna Heights
MA, New Mexico State University

Kinsella, John . . . . . **Instructor,**
Business Technologies Division
ATS, Cincinnati Technical College
ACFCC Certified Master Chef
Fellow of Epicurean World Master Chefs Society
Certified Master Chef, City & Guilds of London Institute
ACFCC Certified Culinary Educator
Certified Hospitality Educator
Past National President of the American Culinary Federation
DBA, Johnson & Wales University

Kirch Smith, Paula . . . . . **Instructor,**
Business Technologies Division
BS, University of Dayton
MEd, University of Cincinnati

Kleemeier, James, PMP . . . . . **Project Manager,**
Workforce Development Center
BS, University of Cincinnati
MBA, Xavier University
PMP, PM Institute

Klein, Gregory P. . . . . . **Instructor,**
Health and Public Safety Division
BS, Miami University
MS, University of Cincinnati

Knepp, Linda . . . . . **Program Chair,**
Humanities and Sciences Divisions
BS, BEd, Capital University

Kneip, Cindy, RHIA . . . . . **Instructor,**
Health and Public Safety Division
BS, Eastern Kentucky University

Knueven, Joel . . . . . **Instructor,**
Center for Innovative Technologies
AAS, Cincinnati State
BFA, Northern Kentucky University

Kobberdahl, Clyde . . . . . **Professor Emeritus,**
Business Technologies Division
BS, University of North Dakota
MEd, University of Cincinnati

Kober, Thomas E., PhD . . . . . **Instructor,**
Health and Public Safety Division
BA, Earlham College
MS, PhD, University of Cincinnati

Krismer, Marianne, EdD, RD, LD . . . . . **Dean,**
Health and Public Safety Division
BS, Edgecliff College
MEd, EdD, University of Cincinnati
RD, University of Cincinnati General Hospital

Kroeger, Janet, RN . . . . . **Instructor,**
Health and Public Safety
BSN, University of Cincinnati

Kuranga, Abraham Akanbi, PhD . . . . . **Instructor,**
Humanities Division
BA, MA, Andrews University
BA, Elmhurst College
PhD, Miami University

LaBarge, Rose . . . . . **.Adjunct Reference Librarian,**
Berry Library
BA, SUNY, College at New Paltz
BA, College of Liberal Arts, Massachusetts
MSLS, University of Kentucky

Laemmle, Carolyn G., MT (ASCP) EdD . . . **.Professor Emeritus,**
Health and Public Safety Division
BA, Edgecliff College
MT (ASCP) St. Mary's Memorial Hospital
MA, College of Mt. St. Joseph
EdD, University of Cincinnati

Lalley, John . . . . . **.Professor Emeritus,**
Sciences Division
BS, Thomas More College

Lapasky, Donna Odom . . . . . **.Instructor,**
Business Technologies Division
CDM CFPP, Cincinnati State Technical and Community College
AAB, Cincinnati State Technical and Community College
BS, Ohio University

Lasorella, Mary (Betsy) . . . . . **.Instructor,**
Business Technologies Division
AAB, Cincinnati State Technical and Community College
ACFCC Certified Executive Pastry Chef

Lateef, Nashid . . . . . **.Assistant Director,**
College Access Programs/EOC
BA, Shaw University
MEd, California Coast University

Leicht, Albert G. . . . . . **.Professor Emeritus,**
Business Technologies Division
BS, West Virginia Institute of Technology
MS, South Dakota State University

Leslie, Andrea . . . . . **.Instructor,**
Humanities Division
BA, University of Cincinnati
MA, University of London
PhD, Union Institute and University

Levy, Brad J. . . . . . **.Instructor,**
Humanities and Sciences Divisions
AS, Cincinnati State Technical and Community College
BS, Northern Kentucky University
MS, Xavier University

Lierl, Debbie, RRT . . . . . **.Program Chair,**
Health and Public Safety Division
BS, University of Cincinnati
MEd, Xavier University

Lipscomb, Sherri, RN, CNE . . . . . **.Instructor,**
Health and Public Safety Division
AS, Angelo State University
BSN, New York University
MS, Wright State University

Lockett, Janice, RN, RCVT . . . . . **.Instructor,**
Health and Public Safety Division
BSN, MSN, University of Cincinnati

Lower, Joe R. . . . . . **.Professor Emeritus,**
Business Technologies Division
BS, MA, The Ohio State University

Lozier, Dan, RN . . . . . **.Instructor,**
Health and Public Safety Division
BSEd, MSN, MEd, Xavier University

Macke, James . . . . . **.Co-op Coordinator,**
Business Technologies Division
BS, BA, MBA, Xavier University

Mallett, Sherri, RHIA, CCS-P . . . . . **.Program Chair,**
Health and Public Safety Division
BS, Miami University
MEd, Xavier University

Mains Sr., Keith G. . . . . . **.Program Chair,**
Business Technologies Division
ATS, Cincinnati State Technical and Community College
Master Certification, National Institute for
Automotive Service Excellence

McClusky, Kathleen M. . . . . . **.Co-op Coordinator,**
Center for Innovative Technologies
BS, Barry University
MEd, Xavier University

McIntosh, Tamara Reid . . . . . **.Instructor,**
Humanities Division
BA, University of Dayton
MA, University of Dayton
JD, University of Cincinnati

McKamey, Jon, PhD . . . . . **.Instructional Designer, Instructor,**
Information Technology Services/
Center for Innovative Technologies
BA, MS, Indiana State University
EdS, Nova Southeastern University
PhD, Nova Southeastern University

McLain, Robert, PE . . . . . **.Instructor,**
Center for Innovative Technologies
BSEE, MBA, University of Cincinnati

McLaughlin, Julie . . . . . **.Academic Advisor,**
Enrollment and Student Development
BS, MA, Eastern Michigan University

Meador, Linda . . . . . **.Professor Emeritus,**
Enrollment and Student Development
BS, MS, Tuskegee University

Mehbod, William, EMT-P . . . . . **.Program Director,**
Health and Public Safety Division
BS, University of Cincinnati

Mellinger, Daniel O. . . . . . **.Professor Emeritus,**
Humanities Division
AB, University of Tennessee
MEd, University of Cincinnati

Menifee, Gwendolyn, EdD . . . . **.Dropout Prevention Specialist,**
College Access Programs/GEARUP
BS, Indiana University
MEd, EdD, University of Cincinnati

Merchinsky, Anthony . . . . . **.Instructor,**
Humanities Division
BS, Gallaudet University

Meyer, Colleen, CIW-CI . . . . . **.Instructor,**
Business Technologies Division
BS, Northern Kentucky University
MEd, Xavier University
Computer Endorsement, Purdue University
CIW Associate

Miller, Claudia, OTD, OTR/L . . . . . **.Program Chair,**
Health and Public Safety Division
OTD, Chatham University
MHS, University of Florida
Cert. OT, University of Florida
BS, Florida State University

Mindhardt, Katye . . . . . **.Professor Emeritus,**
Business Technologies Division
AAB, BS, MEd, University of Cincinnati

Moreno, Rosa-Maria . . . . . **.Instructor,**
Humanities Division
BA, MA, The Ohio State University
MA, Ohio University

Morganroth, Patricia, MSN, RN, CDE . . . . **.Professor Emeritus,**
Health and Public Safety Division
BSN, Villanova University
MSN, University of Cincinnati

Morman, Carol L., PE, PS . . . . . **.Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BSCE, BSLS, Purdue University
MSCE, California State University

Morris, Larry A., PE, EdD . . . . . **.Program Chair,**
Center for Innovative Technologies
AA, Tacoma Community College
BSEE, The Ohio State University
MA, Webster University
MSEE, University of Texas
EdD, Nova Southeastern University

Moss, Joe . . . . . **.Director, Midwest Culinary Institute,**
Strategic Initiatives and Entrepreneurial Development
BA, James Madison University

Mott, Timothy E. . . . . . **.Director,**
Off-Campus Learning
BS, Indiana University of Pennsylvania
MEd, Indiana University of Pennsylvania
PhD, University of Pennsylvania

Myatt, James F. . . . . . **.Instructor,**
Business Technologies Division
ACFCC Certified Culinary Educator
St. Helen's Technical College
Certified Chef, City & Guilds of London Institute
ACFCC Certified Working Pastry Chef
World Master Chef's Society

Nakoff, Mike . . . . . **.Professor Emeritus,**
Center for Innovative Technologies
BS, University of Cincinnati
MEd, Xavier University
Certified Systems Professional,
Institute for Certification of Computer Professionals
Certified Computer Profession,
Institute for Certification of Computer Professionals

Neace Sr., Alan . . . . . **.Instructor,**
Business Technologies Division
AAB, Cincinnati Technical College
BS, Franklin University
ACF Certified Executive Chef
American Academy of Chefs Honor Society
Fellow Master of Epicurean World Master Chefs Society
WACS International Judge
Mondiale de la Gastronomie Chaine des Rotisseurs

Nicely, Kathy, RN . . . . . **.Program Chair,**
Health and Public Safety
BSN, Miami University
MSN, Walden University

Nields, Robert . . . . . **.Program Chair,**
Center for Innovative Technologies
AA, AS, BS, Thomas More College
MBA, Xavier University

Nolan, Timothy . . . . . **.Professor Emeritus,**
Humanities Division
AB, Xavier University

O'Gorman, Kathryn . . . . . **.Director,**
Berry Library
BA, University of Vermont
MAT, MLS, Indiana University

Olubas, Paul E. . . . . . **.Professor Emeritus,**
Humanities Division
BA, MA, Miami University

Orsini, Catherine . . . . . **.Instructor,**
Humanities and Sciences Divisions
BS, Saint Peter's College

Owen, Sandra . . . . . **.Instructor,**
Humanities Division
BA, Miami University
MEd, College of Mt. St. Joseph

Pace, Carla . . . . . **.Intake Specialist,**
College Access Programs/Connect2Success
BA, Xavier University

Palmer, Alice, RN . . . . . **.Instructor,**
Health and Public Safety Division
BA, Earlham College
MS, Pace University

Parrott, Carl L., MD . . . . . **.Medical Advisor,**
Clinical Laboratory Program
Health and Public Safety Division
BA, Yale University
MD, Emory University

Darla Paul-Dixon . . . . . **.Dropout Prevention Specialist,**
BA, Union Institute
MEd, Miami University

Penn, Leonard R. . . . . . **.Professor Emeritus,**
Business Technologies Division
BA, University of Cincinnati
MEd, Xavier University

Piazza, Shirley E., EdD . . . . . **.Associate Dean,**
Humanities and Sciences Divisions
BS, Kutztown State University
EdD, MEd, University of Cincinnati

Pitman, Lloyd . . . . . **.Professor Emeritus,**
Business Technologies Division
BS, University of Cincinnati
MEd, Xavier University

Pitts, Bessie, LPC, LSW . . . . . **.Associate Dean,**
Health and Public Safety Division
AS, BS, MA, University of Cincinnati

Pohlgeers, Linda S. . . . . . **.Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BA, University of Cincinnati
MEd, Xavier University

Posey, Monica, EdD . . . . . **.Academic Vice President,**
BS, Cornell University
MBA, University of Pennsylvania
EdD, University of Cincinnati

Prather, Rochell S. . . . . . **.Education Specialist,**
College Access Programs/VUB
BS, Southern University
QA/QC Certification,
Cincinnati State Technical and Community College

Prince, Bernell . . . . . **.Academic Advisor,**
Enrollment and Student Development
BS, The Union Institute

Rahmes, Catherine M. . . . . . **.Professor Emeritus,**
Humanities Division
AB, MA, Miami University

Recasner, Chantae . . . . . **.Instructor,**
Humanities Division
BA, Loyola University New Orleans
MA, The Ohio State University

Revely, Alicia . . . . . **.Instructor,**
Business Technologies Division
BBA, Washburn University
MBA, Xavier University

Richards, Kim, EdD . . . . . **.Co-op Coordinator,**
Center for Innovative Technologies
BSIE, Central State University
MEd, EdD, University of Cincinnati

Rimlinger, Joyce . . . . . **.Program Chair,**
Humanities Division
BA, Nazareth College
MA, New York University

Roberts, Joseph . . . . . **Co-op Coordinator,**
Business Technologies Division
BBA, University of Cincinnati

Robinson, Daphne T. . . . . . **.Program Chair,**
Health and Public Safety Division
BS, University of Cincinnati

Robinson, Janice, PhD . . . . . **.Instructor,**
Humanities Division
BA, Louisiana College
MA, Institute of Transpersonal Psychology
PhD, Institute of Transpersonal Psychology

Robinson, Jennifer . . . . . **Adjunct, Reference Librarian,**
Berry Library
BA, Ohio University
MLIS, University of Kentucky

Rohr, Denise, RN . . . . . **Program Chair,**
Health and Public Safety Division
BSN, University of Pittsburgh
MSN, University of Cincinnati

Rolfsen, Peggy L. . . . . . **Instructor,**
Health and Public Safety Division
BA, Thomas More College
MS, University of Cincinnati

Romero-Smith, Linda S. . . . . . **Academic Advisor,**
Enrollment and Student Development
BS, Saint Mary of the Plains College

Rosa, Effie, EdD . . . . . **Academic Advisor,**
Enrollment and Student Development
BS, Miami University
MEd, EdD, University of Cincinnati

Rose, Connie, RN, BC . . . . . **Instructor,**
Health and Public Safety Division
BA, Miami University
BSN, St. Louis University
MS, Wright State University

Rowe Jr., Samuel D. . . . . . **Area Chair,**
Humanities Division
BS, Northern Kentucky University
MDiv, MA, Southern Baptist Theological Seminary

Rugless, Katrina . . . . . **Assistant Director,**
College Access Programs/Student Support Services
BA, Daemen College
MEd, Xavier University
Certificate of Advanced Graduate Studies
for Counseling Licensure,
University of Cincinnati

Rupp, Rodney . . . . . **Professor Emeritus,**
Sciences Division
BS, BEd, University of Cincinnati

Ruppert, Kathleen . . . . . **Director, Business Development,**
Strategic Initiatives and Entrepreneurial Development
BA, Mount Saint Mary's College

Salehi, Siamak . . . . . **Instructor,**
Humanities Division
BS, Institute of Banking Sciences
MA, Ohio University
MA, University of Cincinnati

Scardina, Kathleen . . . . . **Library Assistant,**
Berry Library

Schaffeld, Linda, CPA . . . . . **Transfer Program Chair,**
Business Technologies Division
AAB, Cincinnati Technical College
BBA University of Cincinnati
MA, College of Mount St. Joseph

Schlaak, Janice . . . . . **Instructor,**
Humanities and Sciences Divisions
BS, Kent State University
MS, University of Cincinnati

Schlueter, Ralph C. . . . . . **Professor Emeritus,**
Sciences Division
BS, MEd, Xavier University

Schmid, James E. . . . . . **Program Chair,**
Center for Innovative Technologies
BS, Embry Riddle Aeronautical University
A&P License, Alabama Aviational Technical College
MEd, Xavier University

Schmitt, Christopher, MD . . **Medical Director, Respiratory Care**
Health and Public Safety Division
BS, Vanderbilt University
MD, University of Cincinnati College of Medicine

Schulte, Linda F. . . . . . **Instructor,**
Business Technologies Division
BS, Eastern Kentucky University
MA, Xavier University

Scott, Damianne . . . . . **Advisor,**
Office of Financial Aid
BA, Xavier University
MA, Xavier University

Sefton, Cindy . . . . . **Library Circulation Coordinator,**
Berry Library
BA, Baldwin Wallace College
MLIS, Kent State University

Sefton, Richard J. . . . . . **Professor Emeritus,**
Business Technologies Division
BS, MEd, University of Cincinnati

Shadle, Ryan . . . . . **Instructor,**
Humanities Division
BS, MA, Northern Kentucky University

Sheldon, Jeffrey A., CCE . . . . . **Program Chair,**
Business Technologies Division
AAB, Cincinnati Technical College
BS, Miami University
MEd, University of Cincinnati
ACFCC Certified Culinary Educator

Siekbert, Cinda, RN . . . . . **Instructor,**
Health and Public Safety
BSN, University of Cincinnati
MSN, Walden University

Simmermon, David S. . . . . . **Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BS, University of Houston
MS, University of Cincinnati

Sinex, Robin, RN . . . . . **Instructor,**
Health and Public Safety
BSN, Indiana Wesleyan University

Sketch, Connie J. . . . . . **Associate Dean,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BSME, Tri State University
MS, University of Cincinnati

Smith, David W. . . . . . **Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BS, Northern Kentucky University

Smith, Rayma E., PhD . . . . . **Dean,**
Humanities and Sciences Divisions
BS, Miami University
MA, PhD, The Ohio State University

Speller, Sandra, RHIT . . . . . **Instructor,**
Health and Public Safety Division
AA, Cincinnati Technical College
BA, St. Scholastica

Stark, Thomas J. . . . . . **Professor Emeritus,**
Sciences Division
BS, MEd, Xavier University

Staples, JaRhonda . . . . . **Academic Coach,**
College Access Programs/Student Support Services
BS, Tennessee State University
MEd, University of Louisville

Stewart, Briggetta E. . . . . . **Professor Emeritus,**
Business Technologies Division
AAB, Cincinnati Technical College
Certified Protection Personnel,
American Society for Industrial Security

Stivers, Tracey . . . . . **Coordinator of Technical Services,**
Berry Library
BA, Northern Kentucky University
MSLS, University of Kentucky

Stork, Eileen, RN . . . . . **.Instructor,**
Health and Public Safety
BSN, Edgecliff College of Xavier University
MSN, Wright State University

Stormer, Thomas, RRT . . . . . **.Instructor,**
Health and Public Safety Division
AAS, Sinclair Community College
BBA, University of Cincinnati

Stoll, Kenneth V. . . . . . **.Professor Emeritus,**
Center for Innovative Technologies
BS, Miami University
MEd, University of Cincinnati

Stump, Diane S., LPC, ... **.Counselor,**
Enrollment and Student Development
BA, MA, Eastern Kentucky University

Sunderhaus, Edward . . . . . **.Instructor,**
Sciences Division
BS, Xavier University

Swanson, Richard . . . . . **.Instructor,**
Sciences Division
BS, University of Cincinnati

Swinford, Margaret, RN . . . . . **.Professor Emeritus,**
Health and Public Safety Division
Diploma, Bethesda Hospital School of Nursing
BSN, Edgecliff College
MSN, University of Kentucky

Thie, Maureen . . . . . **.Cake Decorator, Manager,**
Strategic Initiatives and Entrepreneurial Development
AAS, University of Cincinnati
AAS, Cincinnati State Technical and Community College
RBA-Certified Cake Decorator

Thompson, Alyce . . . . . **.Instructor,**
Humanities and Sciences Divisions
BA, University of Cincinnati
MEd, Xavier University

Turner, Jackie, RDCS, RVT . . . . . **.Program Chair,**
Health and Public Safety Division
BS, University of Dayton
AS, Kettering College of Medical Arts

Turner, Lowrie D. . . . . . **.Dropout Prevention Specialist,**
College Access Programs/GEARUP
BS, University of Cincinnati
MSW, The Ohio State University

Ulrich, Dennis, N. PhD . . . . . **.Executive Director,**
Workforce Development Center
BS, MA, PhD Miami University

Varchol, Dorothy, RN, BC . . . . . **.Instructor,**
Health and Public Safety Division
Diploma, Nesbitt Memorial Hospital
BSNEd, Wilkes College
MA, University of Scranton
MSN, University of Cincinnati

Vernatter, Don . . . . . **Library Circulation Assistant,**
Berry Library
AA, Cincinnati State Technical and Community College

Vetter, Jeffery A. . . . . . **.Program Chair,**
Center for Innovative Technologies
AAB, Cincinnati Technical College
BSBA, Xavier University

Vorbroker, Diane K., PhD . . . . . **.Instructor and Program Chair,**
Health and Public Safety Division
BS, Furman University
PhD, University of Cincinnati

Vossmeyer, Philip A. . . . . . **.Program Chair,**
Health and Public Safety Division
AAB, Cincinnati Technical College
AAS, Northern Kentucky University
Certification, Paramedic/Firefighter,
American Heart CPR Instructor

Wagner, John P., LPCC, NCC . . . . . **.Counselor,**
Enrollment and Student Development
BS, MEd, University of Cincinnati

Waits, Adam . . . . . **.Co-op Coordinator,**
Business Technologies Division
AAB, Cincinnati State Technical and Community College
BA, Miami University

Waits, Carolyn . . . . . **.Program Co-Chair,**
Business Technologies Division
BS, University of Cincinnati
MEd, Xavier University
ASQ-CQM, CAPM

Walters, Nancy, (ASCP), CMA . . . . . **.Professor Emeritus,**
Health and Public Safety Division
AB, Lindenwood College

Walton, Gary . . . . . **.Program Chair,**
Business Technologies Division
AAB, Cincinnati Technical College
BS, University of Cincinnati

Watts, Olivia, RN . . . . . **.Professor Emeritus,**
Health and Public Safety Division
BSN, University of Cincinnati

Webster, Gary M., PE . . . . . **.Professor Emeritus,**
Center for Innovative Technologies
BSEE, The Ohio State University
Registered Professional Engineer, State of Ohio

Weichold, A. Edward . . . . . **.Instructor,**
Center for Innovative Technologies
A & P License, AAS, Cincinnati Technical College
BS, MS, Embry Riddle Aeronautical University

Weingartner, Paul, PE . . . . . **.Instructor,**
Center for Innovative Technologies
BSEET, University of Cincinnati

Wells, Ralph . . . . . **.Instructor,**
Center for Innovative Technologies
BS, MEngEE, University of Louisville
BS, Cincinnati Christian University

White, Sharon . . . . . **.Program Chair,**
Business Technologies Division
BA, Fisk University
MBA, Xavier University

White, Tenisha . . . . . **.Assistant Director,**
College Access Programs/Upward Bound
BS, Dillard University
MS, Loyola University

Wiggins, Heather R. . . . . . **.Instructor,**
Business Technologies Division
AAB, Cincinnati State Technical and Community College
BA, Indiana University

Wilborne, Shawnya . . . . . **.Clinical Coordinator,**
Health and Public Safety Division
BA, Virginia Polytechnic Institute & State University
AS, Kettering College of Medical Arts

Williams, Otis . . . . . **.Instructor,**
Business Technologies Division
BBA, Thomas More College
MEd, Xavier University
World Champion of Public Speaking, Toastmasters International

Wilson, Cornelius "Jack" . . . . . **.Professor Emeritus,**
Business Technologies Division
BS, University of Cincinnati

Winkle, LaVerne . . . . . **.Professor Emeritus,**
Engineering Technologies Division
EE, BA, University of Cincinnati

Wisuri, Jean A. . . . . . **.Director**
Distance Learning
BA, Indiana University
MA, Western Kentucky University

Wolfer, Katherine, RN, CNOR . . . . . **.Instructor,**
Health and Public Safety Division
Diploma, Christ Hospital School of Nursing
BSN, Northern Kentucky University
MSN, MEd, Xavier University

Wood, Jim . . . . . **Program Co-Chair,**
Business Technologies Division
BS, Eastern Kentucky University
MA, Central Michigan University

Woolf, Geoffrey . . . . . **Area Chair,**
Humanities Division
BA, University of Cincinnati
MFA, University of Iowa

Wright, Jeffrey L. . . . . . **Instructor,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BS & MAS, Embry Riddle Aeronautical University
A & P License

Wright, Nancy . . . . . **Instructor,**
Humanities Division
BA, MA, University of Cincinnati

Wunderlich, William, PE . . . . . **Instructor,**
Sciences Division
BSME, MSME, University of Cincinnati
MSED, Xavier University
Registered Professional Engineer, Ohio

Wyatt, Walter W. . . . . . **Professor Emeritus,**
Business Technologies Division
BS, The Ohio State University

Yelton, Steven J., PE . . . . . **Program Chair,**
Center for Innovative Technologies
AAS, Cincinnati Technical College
BSEE, The Ohio State University
Registered Professional Engineer, State of Ohio

Youngpeter, Donald, PE . . . . . **Program Chair,**
Center for Innovative Technologies
BSME, MSME, University of Cincinnati
Registered Professional Engineer, State of Ohio

Zellner, Suzanne, RNC . . . . . **Instructor,**
Health and Public Safety Division
ASN, Triton College
BSN, MSN, Loyola University

Ziegler, Immanuel . . . . . **Professor Emeritus,**
Sciences Division

Ziegler, Lawrence J., EdD . . . . . **Professor Emeritus,**
Humanities Division
BA, BS, Mount St. Mary Seminary
MEd, Xavier University
EdD, University of Cincinnati

Professional Advisory Committees

Accounting Technology
Nancy Baker . . . . . Federal Home Loan Bank
David E. Britton, CPA, CFP . . . . . Fifth Third Bank
Michael Flaig . . . . . Frisch's Restaurants, Inc.
Claudia Grimm . . . . . Transformance Realty
Richard Thompson . . . . . Internal Revenue Service
Michael Wheatley, CPA . . . . . Grant Thornton

Associate of Arts & Associate of Science
Nicki Beldhaus . . . . . College of Mount Saint Joseph
Susan Bourke . . . . . University of Cincinnati
Nancy R. Hamant . . . . . University of Cincinnati
Jason Moore . . . . . Northern Kentucky University
Dr. Jack Richardson . . . . . Xavier University

Audio/Video Production
Mike Bizzarri . . . . . Independent Director/Writer
Theresa Bunke . . . . . Brightlight Communications
John Knosp . . . . . Madison Park Productions
Phil Mastman . . . . . Sandlot Pictures
John McDaniel . . . . . Sonic Arts
David Morrison . . . . . Independent Director of Photography
Jay Petach . . . . . Sound Images
Preston Price . . . . . PPS Group
Kat Thomas . . . . . Eye & Eye Productions
Michael Weber . . . . . Barking Fish Lounge
Jeremy Whitcomb . . . . . Barking Fish Lounge

Automotive Service Management Technology
Eddie Barnett . . . . . AC Delco
Rick Kolde . . . . . Thompson McConnell Cadillac
Curt Manning . . . . . Jeff Wyler Dealer Group
Charles Overby . . . . . Northwest Career Center
Thomas Ruehl . . . . . Westside Auto Service, Inc.
Bob Wanamaker . . . . . Glenway Dodge

Aviation Maintenance Technology
David Angus . . . . . Comair, Inc.
Will Berringer . . . . . Whitewater Aviation
Bob Craig . . . . . Federal Aviation Administration
Jim Croweak . . . . . Chemed
Gary Goodpaster . . . . . Kroger Hangar
Jim Martin . . . . . Comair, Inc.
Richard Vara . . . . . Adjunct & Graduate
Bill Wieland . . . . . Pro Aero
Mark Zeiser . . . . . Airborne Express

Biotechnology
Suzanne Bradshaw . . . . . University of Cincinnati
Martha Brosz . . . . . Cincinnati State
Edith Markoff . . . . . Cincinnati Children's Medical Center
Tim Nolan . . . . . SW Ohio Tech Prep
Tim D. Nolan . . . . . Procter & Gamble
Bill Tacon . . . . . BioOhio

Business Financial Services
Mary Harris . . . . . Schulman Associates
Institutional Review Board, Inc.
Laura Cassedy . . . . . Chiquita North America
Maxim Klochkov . . . . . Fifth Third Bank
Jerome C. Bauer . . . . . FHL Bank of Cincinnati
Steven C. Sprengard . . . . . National City Commercial Capital
Chris Kelso . . . . . Tri State Center for Financial Training

Business Information Systems
Norm Desmarias . . . . . Tier 1 Performance
Clayton Lee . . . . . Cincom, Inc.
Kim Mahoney . . . . . .
Larry Massie . . . . . Mazak
Mike Nakoff . . . . . Professor Emeritus
Arnold Owens . . . . . Graduate, Belcan Partners
Steven Spooner . . . . . Midrange Solutions

Computer Programming & Database Management
Chris Coursey . . . . . Robo Technologies, LLC

Chemical Technology
Judy Harris . . . . . Procter & Gamble
Melissa Long . . . . . Wild Flavors, Inc.
Sue Matz . . . . . Lyondell Chemicals
Julie McMahon . . . . . On-Assignment
Julie Ann Moser . . . . . On-Assignment
Richard Patton . . . . . Givauden
Judy Reid . . . . . High School Teacher & Graduate
Marty Sammons . . . . . Adjunct & Instrustry
Robert Sarama . . . . . Sunny Delight
Amy Weiskittel . . . . . Lyondell Chemicals

Civil Engineering Technology
Steve Cahill . . . . . Abercrombie & Associates
David Cox . . . . . Kleingers & Associates
Steve DeSalvo . . . . . Turner Construction Company
Dave Drury . . . . . Messer Construction Company

Sean Foley . . . . . .Northern Kentucky University
Jon Gothard . . . . . .SHP Leading Design
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Dan Jones . . . . . .Drees Homes
Ken Jones . . . . . .Turner Construction
Tom Kennedy . . . . . .Tom Kennedy, PE
Dick Krehbiel . . . . . .Roth Partnership
Samir Kulkarni . . . . . .Solica Construction
Robert May . . . . . .RLM Consultants
Bud Payne . . . . . .B.L. Payne & Associates
Bill Rutz . . . . . .Messer Construction Company
Dave Shaffer . . . . . .Midwest Utility Consultants
Bob Smyth . . . . . .HGC Construction
Tyler Wayne . . . . . .Cincinnati State Student
Dan Wireman . . . . . .Cleveland Construction

Clinical Laboratory Technology
Nancy Alexander . . . . . .Mercy Health Partners
Judy Bartlett . . . . . .Ft. Hamilton Hospital
Diane Cundiff . . . . . .TriHealth
Robert Dreyer . . . . . .TriHealth
Angela Heinz . . . . . .University Hospital
Sandy Hoff . . . . . .Dearborn County Hospital
Donna Knight . . . . . .TriHealth
Dr. Carolyn Laemmle . . . . . .Cincinnati State College
Carl L. Parrott, Jr., MD . . . . . .Pathologist
Eileen Stern . . . . . .The Jewish Hospital
Beth Warning . . . . . .St. Elizabeth Medical Center

Community Health Worker
Jill Byrd . . . . . Cincinnati Health Department
Gayle Foster . . . . . Retired, Hamilton County of Jobs and Family Services
Wendy Hess . . . . . TriHealth
Intisar Kahani . . . . . Cincinnati Health Department
Roberta Lee . . . . . University of Cincinnati College of Nursing
Rebecca Montenegro . . . . . Santa Maria Community Services
Blair Schoen . . . . . Santa Maria Community Services

Computer Network Engineering Technology
Perry Buffington . . . . . .Protocol, Inc.
Eric Capal . . . . . .City of Cincinnati
Lori Feldbauer . . . . . .Enhanced Telecommunications
Guy Guckenberger . . . . . Guckenberger Computer and Network Solutions
Michael Herrmann . . . . . .University Hospital - Health Alliance
Edward Keyes . . . . . .Milford Exempted Village Schools
Eric Kornau . . . . . .Keyedge, Inc.

Diagnostic Medical Sonograpy Program
David Bailey . . . . . .St. Luke Hospital
Debbie Conner . . . . . .St. Elizabeth South
Susan Gomien . . . . . .Children's Hospital Medical Center
Cathy Griffin . . . . . .Bethesda North Hospital
Elisa Hettesheimer . . . . . .University Hospital
Kathy Houser . . . . . .Bethesda North Hospital
Brian Jones . . . . . .The Christ Hospital
Gary Merhar, MD . . . . . .Co-Medical Director
Connie McCoy . . . . . .Children's Hospital Medical Center
Angela Miller . . . . . .Mercy Hospital
Susan Morehead . . . . . .Veteran's Hospital
Karen Thomas . . . . . .University Hospital
Rick Willis . . . . . .Phillips Ultrasound
Creighton Wright, MD . . . . . .Co-Medical Director
Kathy Wright . . . . . .Bethesda North Hospital

Dietetic Technology
William Bozarth . . . . . .Colonial Senior Services
Sarah Couch, PhD, RD . . . . . .University of Cincinnati
Elise Cowie RD, LD . . . . . .University of Cincinnati
Micki Fratianne RD, LD, CN . . . . . .Nutricon
Letitia Hess RD, LD . . . . . .Children's Hospital Medical Center
Jessica Johnson, RD, LD . . . . . .Milford City Schools
Paul Kocsis, LNHA . . . . . .Residence at Greystone
Robin Phillips, RD, LD . . . . . .Butler County Educational Services Center
Keith Reeb CDM, CFPP . . . . . .Montgomery Care Center
Angie Ross DTR . . . . . .Dietary Solutions
Rohn Vickers RD, LD . . . . . .Alliance Health Care
Carol Wright RD, LD . . . . . .Mercy Franciscan Hospitals
Cindy Yocum, BS, DTR, CDM, CFPP . . . . . .Ellenbee Leggett

Early Childhood Care and Education Program
Carol Bray Johnson . . . . . .Community Action Agency
Sharon Garrett . . . . . .Cincinnati Public Schools
Cynthia Grant . . . . . .Cincinnati State Graduate
Gillain Pratt . . . . . .Pratt CDA and Tutoring
Gloria Stewart . . . . . .LPN
Susan Stai Zuriek . . . . . .YMCA Child Care

Electro-Mechanical Engineering Technology
Charles Faulkner . . . . . .CRF
Denis George . . . . . .Kroger
George Harperink . . . . . .Mazak
Randy A. Kappesser . . . . . .Unova
Matthew Metzner . . . . . .Cincinnati State Student
Rodney Roseman . . . . . .University of Cincinnati
Tim Sisson . . . . . .Retired Industry

Electrical Engineering Technologies
Jim Brooke . . . . . .The Ohio State University
Barry Bruns . . . . . .Masterplan Inc.
Glen Elsener . . . . . .Elsener Electronics
Kevin Ferguson . . . . . .Children's Hospital
Joan Glover . . . . . .Diamond Oaks
Joe Happ . . . . . .Renovo, Inc.
Greg Herr . . . . . .Masterplan Inc.
Joost Meijer . . . . . .Children's Hospital
Darrell Neuhausel . . . . . .Bethesda Hospital North
Scott Segalewitz . . . . . .University of Dayton
Neil Sterrett . . . . . .St. Elizabeth & Graduate
Terry Teipel . . . . . .St. Elizabeth & Graduate
Tom Wallenhorst . . . . . .Graduate
Harold Wiebe . . . . . .Northern Kentucky University

Electroneurodiagnostic
Nancy Borchers . . . . . Ross School District
Jennifer Cavity . . . . . Adult Neurology
Roz Danaher . . . . . Adult END Technology
David Ficker . . . . . Adult Neurology
Jamilah Hackworth . . . . . Cincinnati State
Kid Lee . . . . . Pediatric Neurology
Anne Loochtan . . . . . Cincinnati State
Louise Pittman . . . . . Pediatric END Technology
Doug Rose . . . . . Pediatric Neurology
Ann Winkler . . . . . Polysomnography

EMS-Paramedic
Trish Brooks . . . . . .Forest Park Fire Department
Tom Cahill . . . . . .Cincinnati State
Andrea Glassman . . . . . .Mercy Mt. Airy Hospital
Dan Lankin, M.D. . . . . .Qualified Emergency Specialist, Inc.
Debra Lierl . . . . . .Cincinnati State
Bill Mehbod . . . . . .Cincinnati State
Steve Nuckols . . . . . .Graduate, Blue Ash Fire Department
Erin Sarvis . . . . . .Cincinnati State
Nadine Swift . . . . . .West Joint Ambulance District
Phil Vossmeyer . . . . . .Cincinnati State
Allen Walls . . . . . .Colerain Township Fire Department
Paul Wright . . . . . .Montgomery Fire Department

Environmental Engineering Technology
Paul Bishop, PhD . . . . . .University of Cincinnati
Barbara Browne . . . . . .Metropolitan Sewer District

Cheryl Bush . . . . . .Cincinnati Water Works
Ashlee Decker . . . . . .Graduate, Fernald Preserve
Meredith Cloran . . . . . .Graduate, MACTEC
David Contant . . . . . .Payne Firm
Bonnie Fancher . . . . . .Switzerland County High School
Craig Frye . . . . . .Graduate, SD #1
Carl Gatton . . . . . .Warren County Water & Sewer District
Cathy Glassmeyer . . . . . .Fernald Preserve
Mariano Haensel . . . . . .Ohio EPA
Charles Kane . . . . . .CEO Kane Environmental
Chris Lorentz, PhD . . . . . .Thomas More College
Ann Maloney . . . . . .St. Henry District High School
Lynn Marshall . . . . . .Environmental Consultant
Chad McEvoy . . . . . .Hamilton County Environmental Services
Amanda Parsley . . . . . .Cincinnati State Environmental Club
George Schewe . . . . . .Trinity Consultants
Harry Stone . . . . . .Battelle
Brian Wilson . . . . . .Cincinnati State Student

Fire Service Technology
Terry Doherty . . . . . .Cincinnati State College
Harold Edwards . . . . . .Delhi Township Fire Department
Chuck Fisher . . . . . .Norwood Fire Department
Mike Gregorio . . . . . .Cincinnati Fire Department
Howard Harper . . . . . .Cincinnati Fire Department
Robert Herrlinger . . . . . .Anderson Township Fire Department
B. J. Jetter . . . . . .Sycamore Township Fire Dept.
Jesse Moore . . . . . .Delhi Township Fire Department
Chuck Palm . . . . . .Colerain Twp. Dept. of Fire and EMS
Terry Ramsey . . . . . .Fairfax/Madison Fire Rescue Dept.
Ron Schneider . . . . . .Northern Kentucky

Emergency Management
Joyce Vossmeyer . . . . . .Cincinnati State College
Debbie Walker . . . . . .Sycamore Township Fire Department

Geriatrics
Christina Gilardi . . . . . .Student
Georganna Miller, OTR/L . . . . . .Xavier University
Michelle Perry, COTA/L . . .Health South Rehabilitation Center
Christie Tuttle, COTA/L . . . . . .Summit Behavioral Healthcare

Graphic Design
Vince Knueven . . . . . .Cincinnati State Graduate
James Westbrooks . . . . . .J2 Designs

Graphic Imaging/Packaging & Advertising Technologies
Ron Dettmer . . . . . .C.J. Krehbiel Co.
Chris Deye . . . . . .Phototype
Kristi Fine . . . . . .Corporate Document Solutions
Robb Frimming . . . . . .Schawk
Paul Hilvert . . . . . .Berman Printing
Jaci Jones . . . . . .Button Up
Bob Kissel . . . . . .KDM Signs
Pat Meehan, Jr. . . . . .Mr. Label
Nick Ruter . . . . . .Cincinnati Enquirer
Deborah Simpson . . . . . .Multi-Craft Litho
Steve Wardwell . . . . . .Stevenson Photo Color

Health Excel Services
Tifanni Curry, OTA . . . . . .Mentor
Jim Flesch . . . . . .Colerain High School
Jim Lothrop . . . . . .T-CAP Work-based Learning Coordinator
Bessie Pitts . . . . . .Cincinnati State
Jenny Skinner . . . . . .TriHealth Corporate Educational Services

Health and Fitness Technology
Tom Arnold . . . . . .Tri Health
William Cagle . . . . . .Cincinnati State
Kathy Ison . . . . . .Episcopal Retirement Center
June Lindle Chewning . . . . . .Harrison Fitness Center
Dottie Belle Meymann . . . . . .Independent Consultant
Jan Montague . . . . . .Montague, Eippert & Associates
Gary Moritz . . . . . .Harrison Fitness Center
Kim Neff . . . . . .MS Society
Sindy Robbins . . . . . .Cincinnati Children's Hospital
Michelle Suding . . . . . .Cincinnati State
Dr. Bradley Wilson . . . . . .University of Cincinnati

Health Information Management Technology
Michele Brakie . . . . . .Group Health Associates
Mary Connolly . . . . . .University Hospital
Brenda Cox . . . . . .Mercy Health Partners
Colette Ferguson . . . . . .Veterans Medical Center
Candy Grannis . . . . . .Mercy Health Partners
Joyce Lehmann . . . . . .Medical Recovery Systems
Beth Liette . . . . . .Cincinnati Children's Hospital
Tracey Little . . . . . .Medical Recovery Systems
Leslie Markesberry, RHIT . . . . . .TriHealth
Carla Nadaja, RHIA . . . . . .Veterans Medical Center
Margie Nimeskern . . . . . .United Audited Systems
Angela Price . . . . . .Jewish Hospital
Niki Price . . . . . .TriHealth
Cheri Puthoff . . . . . .Mercy Health Partners
Paula Ross . . . . . .Clinton Memorial Hospital
Randy Smith . . . . . .Mercy Health Partners
Fern Willis . . . . . .Atrium Medical Center

Health Unit Coordinator
JoEllen Monroe . . . . . .Shriners Burns Hospital
Shirley Powell . . . . . .Bethesda Hospital
Sarah Wills-Dubose . . . . . .Summit Behavioral
Karen Winstead . . . . . .Veterans Medical Center

Hospitality Technologies
David Cook . . . . . .Daveed's at 911
Jim D' Wolf . . . . . .Twin Lakes at Montgomery
Sean Daly . . . . . .
Kyle Goebel . . . . . .
Rachel Hostiuck . . . . . .Maketewah Country Club
Todd Kelly . . . . . .Hilton Cincinnati Netherland Plaza
Pat O'Callaghan . . . . . .Queensgate Foodservice
Shelley Rudisill . . . . . .WILD Flavors
Jeff Rouse . . . . . .Hilton Cincinnati Netherland Plaza
Dan Tudor . . . . . .
Michael Vanfleet . . . . . .Cintas Center

Industrial Design
Philip Brookshire . . . . . .Design Zone
Soo-Shin Choi . . . . . .University of Cincinnati
Brad Hammond . . . . . .Hammond & Associates, University of Cincinnati
Philip Hughes . . . . . .Graduate
Charles Marzette . . . . . .Freelance Industrial Designer, Adjunct Instructor
Phil Meredith . . . . . .Graduate
Matt Miller, IDSA . . . . . .Ethicon Endo-Surgery
Mike Palmisano . . . . . .Haney Packaging Resource Center, Adjunct Instructor, Graduate
Dave Schwanemann . . . . . .Freelance Industrial Designer, Adjunct Instructor

Information Management
Jennifer Benjamin . . . . . .Greenbaum, Doll & McDonald
Stephanie Bolia . . . . . .Federated Dept Stores
Tricia A. DiLonardo . . . . . .Frost, Brown & Todd
Linda Huelsman . . . . . .Seton High School
Yvette Hunter . . . . . .VA Hospital
Misty Mercurio . . . . . .The Procter & Gamble Company
Susan Schehr . . . . . .VA Hospital
Linda Schulte . . . . . .Adjunct Instructor
Adrienne Swensgard . . . . . .OFFICETEAM

Integrative Medical Massage Therapy
Sharon Barnes, PhD, RMT . . . .SHI School of Medical Massage
Debra Bomkamp, RMT . . . . . .SHI School of Medical Massage
Heather Morgan, MD . . . . . .SHI School of Medical Massage
Patricia Terrell, RMT . . . . . .SHI School of Medical Massage
Sheryl Turner, RMT . . . . . .SHI School of Medical Massage

International Trade Management
Steve Dullaghan . . . . . .Ceva Freight Management
Tom Voss . . . . . .DHL Global Forwarding
Kerry Byrne . . . . . .Total Quality Logistics
Brian Coughlin . . . . . .Expeditors International

Interpreter Training
Ruby Downie . . . . . .Cincinnati State
Greg Ernst . . . . . .St. Rita School for the Deaf
Pamela Eubanks . . . . . .Deaf Institute
Bryan Eubanks . . . . . .Deaf Institute
Julie Hallibren . . . . . .Cincinnati Public Schools
Libby Sandy . . . . . .Hamilton Co. Educational Services Center

Landscape Horticulture Technologies
Joe Boggs . . . . . .Ohio State Extension
Chris Cook . . . . . .CruCutters LLC
Jim Crumbacher . . . . . .William A. Natorp Company
Rick Doesburg . . . . . .Thornton Landscape
Mike Donovan . . . . . .Brickman
Jim Hansel . . . . . .Diamond Oaks Vocational School
Sean Mullarkey . . . . . .Wolf Creek Company
Matt Newcomer . . . . . .Brickman
Pat O'Brien . . . . . .Hyde Park Country Club
Jennifer Radcliffe . . . . . .William A. Natorp Company
Tom Smith . . . . . .Spring Grove Cemetery and Arboretum
Ruth Ann Spears . . . . . .Cincinnati Parks
Dan Walter . . . . . .City of Blue Ash Golf Course
Kevin Werbrich . . . . . .Werbrich's Landscaping

Law Enforcement
Alan Jones, ...Police Academy Commandant, Great Oaks
Chief Mike Schappa, ...Sharonville Police Department
Capt. Paul Humphries, ...Cincinnati Police Department
Mike Wylie, ...Cincinnati State Campus Police
Dr. Carolyn Turner, ...Union Institute

Management of Technology
Richard K. Afanuh . . . . . .AT&T
Frankie Baker . . . . . .Cincinnati State
Wade Edwards . . . . . .Fifth Third Bank
Steve Gutter . . . . . .Kroger
Frank Hill . . . . . .Hilronics
Brenda Hogan . . . . . .Duke Energy
Vernon Jackson . . . . . .University of Cincinnati
Janice Lee . . . . .Cincinnati Children's Hospital Medical Center
Brend McCaskill . . . . . .AboutGreaterCincinnati.com
Terry Meinking . . . . . .Great Oaks
Verale Phillips . . . . . .Retired, Cincinnati State
Francis Reynolds . . . . . .Med Plus
Roy Reynolds . . . . . .IBM
Kay Atkins Smith . . . . . .Beers, Yunker & Company
David Strange . . . . . .Xerox Corporation
Eric Westley . . . . . .The Procter & Gamble Company
Will White . . . . . .Connect to Success

Management/Marketing Technologies
Brandon Johnson . . . . . .Verizon Wireless
Kevin Mohan . . . . . .Premier Dealer Services
Rose Curtin . . . . . .Thompson Publishing
Len Wedig . . . . . .Ride Smart
Anthony Durso . . . . . .The Friends of Baker-Hunt
Jeff Holtegel . . . . . .Classic Coffee and Vending
Derek Robb . . . . . .Group Realtor's
Andrew Lohmiller . . . . . .Coldwell Banker
Kirsten M. Max . . . . . .Cincinnati Paralegal Association
Kathy Grote . . . . . .Taft, Stettinius & Hollister

Mechanical Engineering Technology
Muthar Al-Ubaidi . . . . . .UC College of Applied Science
Kevin Bruce . . . . . .Parkway Products
Eric Huhn . . . . . .Ross High School / Butler Tech
Jerry Nieb . . . . . .Vold Solutions, Inc.
Gary Niemann . . . . . .KE-Burgmann USA

Medical Assistant Certificate
Philip Amato, CMA . . . . . .Cincinnati State
Elsy Caldwell, II, MD . . . . . .Daughtery Medical Group
Jeana Crawford, RN . . . . . .Humana
Holly Elliott, RMA . . . . . .Cincinnati State
Denise Rohr, RN . . . . . .Cincinnati State
Karen Sloane, RN . . . . . .Great Oaks
Staci Wagner . . . . . .Cincinnati Health Department
Angela Young, RN . . . . . .Cincinnati State

Multi-Competent Health Technology
Daphne Robinson . . . . . .Cincinnati State
Sandy Speller . . . . . .Cincinnati State

Network Administration
Timothy Dewald . . . . . .Cincinnati State
Marino Garcia . . . . . .Great American Financial
Donald Nickol . . . . . .Nickol Networking
John Perry . . . . . .JP Computer Solutions

Nurse Aide Training
Laurel Alfieri, RN, ...Nurse Aide Training Program
Judith Dean, RN, ...Marjorie P. Lee Retirement Community
Pam Ecker, RN, ...Superior Care Plus
Dwan Marshall, RN, ...Maple Knoll Home Health
Belinda Rose, RN, ...Beechwood Home
Carol Whittkamp, RNC, ...Mother of Margaret Hall

Nursing
Jo-Ann Adelsperger, EdD, RN . . . . . .Director, University of Cincinnati RN-BSN Mobility Program
Pam Fernback, RN, EdD . . . . . .TriHealth Corporate Education
Delphine Hazaard, RN . . . . . .Program Graduate
Lisa Heine, RN . . . . . .TriHealth Occupational Health Services
Julie Holt, RN . . . . . .Vice President Patient Services, West Chester Medical Center
Joyce Keegan, RN, MHA, CHE . . . . . .Vice President for Nursing, Mercy Western Hills
Elaine McGuire, PhD, RN . . . . . .Vice President of Patient Care, TriHealth
Bonnie Pfaffenberger, RN . . . . . .Bethesda North Hospital Nurse Recruiter
Patricia Schultz, MSN, RN . . . . . .HomeCare
Jennifer Skinner, MSN, RN . . . . . .TriHealth Nursing Support Systems and Corp. Educational Services
Laura Tewes, RN . . . . . .Mercy Health Care
Jeff Trees, MSN, RN . . . . . .Tri-Health
Tanya Trotter, BSN, RN . . . . . .Program Graduate
Nancy Wilson, RN . . . . . .Director, Quality Resource Management, Deaconess Hospital

Occupational Therapy Assistant Technology
Dayle Baeker-Farmer . . . . . .Community Representative
Ralph Dehner, COTA/L . . . . . .Mighty Vine Wellness Club
Jim Hanna, OTR/L . . . . . .Cincinnati Children's Hospital Medical Center
Marita Hensley, COTA/L . . . . . .Veterans Administration
Valerie Hermann, OTR/L . . . . . .University of Cincinnati
Claire Morress, OTR/L . . . . . .Xavier University
Megan Radcliffe, S/OTA . . . . . .Student Representative
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PC Support and Administration
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Greg Herr . . . . . .Masterplan, Inc.
Tom Wallenhorst . . . . . .Graduate

Power Systems Engineering Technology
Steven Barger . . . . . .Duke Energy Corp.
Keith Frasher . . . . . .Cincinnati Paperboard
Brad Ginter . . . . . .Fosdick & Hilmer, Inc.
Mark Hoeweler . . . . . .Brecon
Von Huffaker . . . . . .Duke Energy Corp.
Adam Larkins . . . . . .Endeavor Electric
Vern McKinley . . . . . .Duke Energy Corp.
Tim Rush-Ossenbeck . . . . . .Nazca Design Services
Michael Posey, PhD . . . . . .UC College of Applied Science
David Preston . . . . . .Duke Energy Corp.
Ted Schumacher . . . . . .Power Delivery Work Center
Mike Summers . . . . . .PSET Student

Practical Nursing
Tim Armstrong, SPHR . . . . . Riverview Community
Richard Barasch . . . . . Tri-County Extended Care Center
Nancy Burns, RN, MSN . . . . . Drake Center
Susanne Cassidy RN, BSN . . . . . Cincinnati Children's Hospital Medical Center
Lisa Cowden . . . . . Carington Health Systems
Marie Garrison RN, MSN . . . . . Emergency Department Jewish Hospital
Adrian Gertz, RN . . . . . Sharonville Health Department
Mark McGrew LPN . . . . . Cincinnati Veterans Affairs Medical Center
Janet Miller . . . . . Mercy Health Partners
Jamie Morris RN, BSN . . . . . Mountain Crest Nursing and Rehabilitation Center
April Murdock RN . . . . . Graduate/Industry
Deana Ratterman, RN, MSN . . . . . Cincinnati Veterans Affairs Medical Center

Pre-Business Administration
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Barbara Garand . . . . . .Xavier University
Scott Gregory . . . . . .University of Cincinnati
Leslie Kyle . . . . . .Northern Kentucky University
Debi Milne . . . . . .Mount Vernon Nazarene University
Sylvia Stevens . . . . . .Wilmington College
Joyce Upham . . . . . .Franklin University
Jenn Wiswell . . . . . .University of Cincinnati

Respiratory Care
Steven Pierce . . . . . .St. Elizabeth Medical Center - Chair
Terry Brom-Burns . . . . . .Cincinnati State
Cyndi Campbell . . . . . .University Hospital
Mike Chaney . . . . . .Cincinnati State
Debbie Clifton . . . . . .Good Samaritan Hospital
Ron Dennler . . . . . .Bethesda North Hospital
Dave Dunlap . . . . . .St. Elizabeth Medical Center
Jerry Edens . . . . . .Children's Hospital Medical Center
Stephanie Eide . . . . . .Jewish Hospital
Robert Eveslage . . . . . .Cincinnati State
Jamie Hamilton . . . . . .University Hospital
Cassie Herald . . . . . .Mercy-Anderson
Debra Lierl . . . . . .Cincinnati State
Mike Mullarkey . . . . . .UC Clermont
Scott Pettinichi . . . . . .Children's Hospital Medical Center
Jenni Raake . . . . . .Children's Hospital Medical Center
Christopher Schmitt . . . . . .Medical Director
Tracy Stamm . . . . . .Public Member
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Software Engineering Technology
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Glen Elsener . . . . . .Elsener Electronics
Briab Esham . . . . . .Emerson Power Transmission
Mary Jo Haynes . . . . . .Encompix Inc
Ari Lopez . . . . . .Graduate and NKU Student
Brian Lutton . . . . . .Medical Research Laboratories
Tony Potts . . . . . .Anthem Blue Cross and Blue Shield
Kim Sharp . . . . . .
Michael Spielvogel . . . . . .Hillenbrand Industries
Tom Wallenhorst . . . . . .Graduate

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Julie Blamer, CST, CSTCFA . . . . . .The Fort Hamilton Hospital
Wanda Dantzler, RN, CNOR, CRCST . . . . . .Cincinnati State
Jenny Etler, CST, SA . . . . . .Mercy Franciscan, Mt Airy Hospital
Dr. Francis Flores, MD . .Mercy Medical Associates Orthopedics
Mary Ann Gellenbeck, RN, COO . . . . . .Prexus Health Partners
Michael Hammon . . . . . .ST Student
Shannon Heeg, CST, CSTCFA . . . . . .
Tony Johnson, CST, CFA . . . . . .Good Samaritan Hospital
Jason Mercer, CST . . . . . .ST. Elizabeth Medical Center –South
LaVon Moore, CST . . .Mercy Franciscan, Western Hills Hospital
Bessie Pitts . . . . . .Assistant Dean, Cincinnati State
Christina Tino, RN . . . . . .The Christ Hospital
Bonnie Volpp, RN . . . . . .St. Elizabeth Medical Center –South
Kathy Wolfer, RN, CNOR . . . . . .Cincinnati State

Workforce Development Center
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