



# *McDowell Technical Community College*

## **Catalog and Student Handbook 2021-2022**

*McDowell Technical Community College*

54 College Drive  
Marion, NC 28752  
(828) 652-6021  
Fax (828) 652-1014  
[www.mcdowelltech.edu](http://www.mcdowelltech.edu)

*NC Works Career Center  
at The Ford Miller Employment and Training Center*

Mailing: 54 College Drive  
Located at 316 Baldwin Avenue  
Marion, NC 28752  
(828) 659-6001  
Fax (828) 659-8733

*MTCC Small Business Center*

Mailing: 634 College Drive  
Marion, NC 28752  
(828) 652-0633  
Fax (828) 659-8038

*Universal Advanced Manufacturing Center*

Mailing: 54 College Drive  
Located at 634 College Drive  
Marion, NC 28752  
(828) 652-0619

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This catalog should not be considered a contract between McDowell Technical Community College and the student. Curriculum offerings may be altered to meet the needs of individuals and a minimum enrollment is required for offering or continuing a class. Tuition and fees are subject to change.

Questions not answered in this publication may be directed to the Student Services Office.

McDowell Technical Community College is an equal opportunity/affirmative action institution. McDowell Technical Community College does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provision of services.

# *Academic Areas*

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# *MTCC Board Of Trustees*

*Gary Stroud, Chairman*

## **Appointees of the Governor's Office**

## **Expiration of Term**

Susan English	June 30, 2022
Robert Ayers	June 30, 2023
Ray McKesson	June 30, 2024
Gary Stroud, Chair	June 30, 2025

## **Appointees of the McDowell County Board of Education**

Nancy Hunter	June 30, 2022
Donald Ramsey	June 30, 2023
Gwen Conley	June 30, 2024
Kay P. Medford	June 30, 2025

## **Appointees of the McDowell County Commissioners**

Randy Hollifield	June 30, 2022
Bill Bach	June 30, 2023
Mark Garrett	June 30, 2024
William Kehler	June 30, 2025

The President of the Student Government Association serves as an Ex-Officio, Non-Voting Member of the Board of Trustees.

## *Administrative Officers*

President	Dr. Brian S. Merritt
Vice-President for Finance and Administration	Ryan Garrison
Vice-President for Learning and Student Services	Dr. Penny Cross
Dean of Career and Technical Education	Stacy Buff
Dean of Arts and Sciences	Judy Melton
Dean of Student Success	Dr. Beverly Watts

# *MTCC Foundation*

In 1977, the McDowell Technical Community College Foundation, Inc. was created to enrich resource development and enhance the quality of college life by procurement of gifts from the private sector. The Foundation operates under the auspices of a Board of Directors who plan and conduct fundraising projects, pledge campaigns and related programs. Individuals or organizations wishing to assist the College may do so by making tax deductible donations of equipment, cash, bonds, stocks, real estate, trusts, life insurance, or bequests. For additional information, contact Dr. Brian S. Merritt, MTCC President, at 828-652-0630 or Madalyn Gaito Director of Development, at 828-652-0630.

## **Members of the Foundation are:**

Paula Avery (West Marion Community Forum)  
Walt Bagwell (Bagwell Insurance Agency)  
Marion Baker (Retired)  
Bob Boyette (City of Marion)  
Marsh Dark (Morrow Insurance)  
Johnnie Davis (Crane Resistoflex)  
Jan Goodson (Retired)  
Gerald Greene (First Citizens Bank)  
Danny Hampton (Freedom Life Ministries)  
William Hollifield (CPA)  
Nancy Hunter (Retired)  
Steve Jones (Joanne Howle Realty)  
Ray McKesson (Retired-MTCC)  
Steve McMahan (Rock Tenn)  
Sharon Parker (Attorney)  
Wes Shelley (Attorney)  
Rachel Withrow (Crooked Door Coffee House)  
Bobby Young (Retired)

Student Government Representative  
Board of Trustee Representative: Nancy Hunter  
Board of Trustee Representative: Ray McKesson

## **MTCC Staff**

Dr. Brian S. Merritt (President), Secretary  
Ryan Garrison (Vice President for Finance & Administration), Treasurer  
Dr. Penny Cross (Vice President for Learning and Student Services)  
Michael Lavender (Director of External Relations)

## *About This Catalog*

This catalog was prepared by Michael Lavender, Director of External Relations, using Adobe InDesign CC software.

# **McDowell Technical Community College Telephone List 2021**

## **Main Campus Number: (828) 652-6021**

Dr. Brian S. Merritt, President	652-0635	Dr. Penny Cross, VP	652-0645	Ryan Garrison, VPF	652-0627
Stacy Buff, Dean	652-0663	Judy Melton, Dean	652-0647	Dr. Beverly Watts, Dean	652-0669
Abernathy, Eric	652-0679	FAX Bldg. 18	659-9710	Nail Tech Adjunct Office	659-0452
Adcock, Tab	659-0492	FAX Business Office	652-1603	NC Works	659-6001
Adjunct Faculty Office	659-0426	FAX ConEd	652-8008	Nur Asst Info Line (CNA)	652-0639
ARC Lab. Bldg. 11	659-0408	FAX NC Works	659-8733	Padgett, Julie	652-0631
Arrowood, Sam	652-0686	FAX Student Service	659-0430	Pearson, Rachel	652-0658
Assoc. Degree Nursing (ADN)	652-0661	Flannery, Robert	652-0657	Pell Grant Info Line	659-0450
Auto Mechanics	652-0671	Forshey, Tony	659-0494	Perry, Jay	652-0670
Bailey, Aprille	652-0629	Foster, Belinda	652-0611	Price, Pam #131	659-6001
Bartlett, Andrew	652-0671	Gaito, Madalyn	652-0630	Print Shop	652-0665
Bartlett, Lora Dr.	652-0605	GED Testing Room	652-0683	Prison	659-7810
Berthelson, Hannah	652-0602	Getty, Richard	652-0694	Ramsey, Stephanie	652-0600
Boardroom Bldg. 17	652-0601	Goble-Talley, Anna	652-0639	Reeves, Gwen	652-0678
Book Store	652-0613	Grindstaff, Susan	652-0675	Robinson, Lisa (MEC Principal)	659-0415
Book Store Office	652-0678	Hall, Joy	652-0604	Ruiz, Betsy	652-0621
Bowling, Chuck	659-0459	Harmon, Ladelle (Bo)	652-0626	Sain, Pamela	659-0451
Brooks, Dalton	652-0622	Harris, Madison	652-0633	Scoles, Keith	652-0693
Buchanan, Darian	652-0688	Health Sciences	659-0434	Security Cell	442-1084
Buchanan, Karen	652-0685	Hensley, Jill	659-0416	Security Office	652-0673
Buff, Tabitha	659-0465	Hensley, Jimmy #140	659-6001	Shelton, Lisa	652-0612
Burnette, Bridget	659-6001	Hollifield, Randy	659-0426	Shuford, Eddie	652-0652
Business Office	652-0696	Hughes, Joni	652-0662	Silver, Rebecca	659-0449
Butler, Rachael	652-0600	HVAC	659-0484	Silver, Sharon	652-0609
Butner, Judy	652-0620	Hyatt, Marc	659-0425	SIM Lab	659-0485
Byrd, Lisa	652-0624	Ingle, Terri (MEC Counselor)	659-0413	Small Business Center	652-0634
Café	652-0615	Jamison, Howard	659-0457	Smith, Jamie	659-0439
Cain, Wingate	652-0632	Johnson, E. Brooke	659-0453	Smith, Melisa	652-0637
Career & College Promise	652-0621	Jordan, Marilyn	652-0648	Smith, Nicole	659-0428
Champ, Thomas #153	659-6001	Jornigan, Sarah	652-0639	Snyder, Cortney	652-0610
Children's Services Network	652-0668	King, Edwin #160	659-6001	Steele, Rhonda	652-0654
Cline, Billy Dr.	659-0448	Laughridge, Tina (MEC Sec	659-0411	Stines, Wayne	652-0693
Cole, Crystal	652-0616	Lavender, Michael	652-0681	Tate, Starr	652-0661
College & Career Readiness #137	659-6001	Ledford, Abigail	659-0443	Telemedicine	652-0639
Cosmetology Lobby	652-0687	Library	652-0604	Tipton, Donnie	659-0407
Cosmetology Office	652-0610	Long, Susan	659-0418	Tipton, Sharon	652-0625
Cross, Chip	652-0672	Lytle, Elizabeth	659-0439	Truett, Lorrie	652-0623
Crowder, Emilee	659-0427	Mabry, Ann	652-0612	Universal Adv. Manuf. Center	652-0619
Culp, Jennifer	652-0650	Machine Shop	652-0693	UAMC Adjunct Office	659-0436
Curtis, Colton	652-0638	Macopson, Elmer	652-0603	Valentino, Jorge	659-0404
Davis, Vonda #155	659-6001	Maietta, Erin (ADN)	652-0641	Valentino, Teresa	652-0634
Day Care Baby Room	652-0600	Maintenance	659-0406	Wakefield, Diana	652-0644
Day Care Kitchen	652-0612	Madden, Blake	652-0682	Walsh, Terrance (Ed)	652-0643
Day Care Office	652-0637	McClelland, Terri (Lab 628)	652-0691	Ward, Claudia	652-0664
DeAngelus, Ramona	652-0684	McCraw, Donnie	652-0671	Wacaster, Penny #137	659-6001
Denton, Zac	659-6001	McCraw, Sandi	659-0414	Waycaster, Brooke	659-0499
Dietrich, Susan	652-0659	McFarland, Kelly Giles	652-0667	Weather, (Students)	659-0419
Dillard, John	652-0606	MEC Nurse	659-0649	Weiler, Joan	652-0651
Dobson, Valerie	652-0699	MEC Secretary	659-0411	Welding	652-0689
Dowdle, Clay	652-0689	Mechatronics	652-0657	Whisnant, Allison	659-0452
Duncan, Annie	659-0497	Minish, Wesley	652-0642	Wilson, Breanna	652-0618
Edwards, Eugene	659-0422	Monosso, Deb	652-0646	Wimsatt, Sherry	652-0653
Effler, Chet	652-0636	Moore, Alan	652-0677	Wood, Ashlee	652-0612
Electrical	652-0657	Moran, Lori	659-0453	Wood, Wanda	652-0668
Engineering	652-0657	Morgan, Andy	652-0655	Woods, Eleanor	652-0698
Esthetics Adjunct Office	659-0455	Morgan, Ronald	652-0674	Wright, Diane	652-0660
Esthetics Lobby	652-0640	Morris, William	659-0484		
FAX Bldg. 17	659-0437	Mullis, Austin	659-0444		

# *Academic Calendar*

## **2021 Fall**

All FT Faculty Return	August 2
Faculty/Staff Development	August 10
Late Registration	August 11
New Student Orientation	August 12
Classes Begin	August 16
End of Drop/Add	August 18
Tuition Refund Deadline/10%	August 25
Labor Day Holiday	September 6 (Holiday 5)
Last Day to Receive Non-Punitive Grade of “W”	September 20
Fall Break (Work/Annual Leave)	October 4-5
Fall Festival SGA Event	October 14
Spring Registration Begins	November 1
Work/Annual Leave	November 24
Thanksgiving Holidays	November 25-26 (Holidays 6-7)
Last Day of Class	December 13
Grades Due	December 15
Work/Annual Leave	December 16-17
Work/Annual Leave	December 20-21
Campus Closed	December 22-24, 27-28 (Holidays 8-12)
Campus Closed	December 29-31 (Mandatory Annual Leave)

## **2022 Spring**

Return to Campus	January 3
Late Registration	January 5
New Student Orientation	January 6
Classes Begin	January 7
Martin Luther King Holiday	January 17 (Holiday 1)
Tuition Refund Deadline/10%	January 19
MTCC Fire Rescue College	March 17-20
Spring Break (Work/Annual Leave)	March 28-April 1
Spring Fling	April 7
Good Friday Holiday	April 15 (Holiday 2)
Registration for Summer/Fall Semesters	April 18
End of Spring Term	May 9
Final Grades Due	May 10
Graduation	May 13

## **2022 Summer**

Late Registration	May 16
New Student Orientation	May 17
Classes Begin	May 18
Tuition Refund Deadline/10%	May 24
Memorial Day	May 30 (Holiday 3)
Independence Day Holiday	July 4 (Holiday 4)
Summer Break (Work/Annual Leave)	July 5-8
End of Eight Week Classes	July 19
End of Summer Term	August 3
Final Grades Due	August 5

## **2022 Fall**

All FT Faculty Return	August 1
Faculty/Staff Development	August 9
Late Registration	August 10
New Student Orientation	August 11
Classes Begin	August 15
Tuition Refund Deadline/10%	August 24
Labor Day Holiday	September 5 (Holiday 5)
Fall Break (Work/Annual Leave)	October 3-4
Fall Festival	October 20
Spring Registration Begins	November 1
Work/Annual Leave	November 23
Thanksgiving Holidays	November 24-25 (Holidays 6,7)
Last Day of Class	December 12
Grades Due	December 14
Work/Annual Leave	December 15, 16, 19, 20
Campus Closed	December 21-23, 26, 27 (Holidays 8-12)
Campus Closed Mandatory Annual Leave	December 28, 29, 30

# MTCC History

## 1964

McDowell Technical Community College was established as the Marion-McDowell Industrial Education Center, located in downtown Marion, N.C. near the corner of State Street and South Garden Street. M-MIEC operated as a satellite unit of Asheville-Buncombe Technical Institute until September, 1967.

## 1967

M-MIEC became an independent unit of the Department of Community Colleges. The first Board of Trustees was sworn in, giving more local autonomy.

## 1970

The school moved to permanent facilities on a 31-acre site at the intersection of Interstate 40 and Highway 226 in Marion.

## 1971

The N.C. General Assembly made it possible for the school to become an independent institution. The College was officially chartered as McDowell Technical Institute.

## 1975

A new building expansion program was completed, adding 39,322 square feet to the existing campus. Expansion included a new Auto Mechanics shop, 500-seat Amphitheatre, Learning Resource Center, Teaching Auditorium (seating 220), permanent administrative offices, classrooms and an expanded Student Commons area.

## 1977

McDowell Technical Institute Foundation, Inc. was created to enrich resource development and enhance the quality of college life by procurement of gifts from the private sector.

## 1979

The N.C. General Assembly enacted a bill to change the school's name to McDowell Technical College.

## 1984

Robert M. Boggs succeeded John A. Price as President, becoming the College's second Chief Administrator. The College undertook a major bond campaign, which resulted in \$2,400,000 for the addition of new facilities.

## 1987

Construction was completed on the Industrial Skills Center, a 32,000 square foot class/lab facility, housing special industrial

skills training facilities and class/lab areas for technical and vocational programs.

The Day Care/Classroom building was completed, housing a day care area for children of MTCC students, Continuing Education classrooms/offices, an auditorium and faculty offices. The new facility added 11,200-square feet to existing campus facilities.

## 1988

McDowell Technical College changed its name to McDowell Technical Community College to more accurately reflect the comprehensive educational opportunities available to the citizens of McDowell County.

The MTCC Small Business Center was funded and established to provide educational opportunities and financial assistance to small businesses in the county.

## 1989

The MTCC Career Center was established, providing students with information and help in choosing careers.

The MTCC Downtown Center, located in downtown Marion at the original site of the Marion-McDowell Industrial Education Center, was established to offer Continuing Education classes.

## 1990

MTCC, in conjunction with Isothermal and Cleveland Community Colleges, established the Foothills Nursing Consortium to begin offering an Associate Degree Nursing Program in 1991.

## 1996

MTCC's North Carolina Information Highway Room was certified and became operational, offering conferences and classes via live interactive video and sound.

## 1997

The MTCC Downtown Center moved to its new location at 35 South Main Street in Marion, where the McDowell County Schools Accelerated Learning Center and the McDowell County JobLink Career Center were also located.

Construction was completed on a new 19,950 square foot classroom building, the Library was renovated and a new hand-capped lift was installed in the Administrative Building. 1,000 square foot was added to the college bookstore.

## 1999

Dr. Robert Boggs retired after 15 years of service to the College. Dr. H. Edwin Beam

became Interim President and the Board of Trustees began the search for a new President.

Today, McDowell Technical Community College offers Associate Degrees, Diplomas, and/or Certificates in more than 30 curriculum programs. The College also offers classes in many areas of Continuing Education. MTCC currently serves more than 6,800 students per year with some type of education and training.

## 2000

Dr. Virginia R. Mitchell became third president of the College. Instructor Jan Alms designed the first College Seal, which was incorporated into the College's Presidential Medallion, vested upon Dr. Mitchell during inaugural ceremonies in May.

## 2004

Dr. Bryan W. Wilson succeeded Dr. Virginia R. Mitchell as president of the College after she retired in December, 2003.

## 2005

Mr. Ford Miller, local businessman, made the largest private donation the college had ever received when he gave MTCC the former Marion Mills Office Building on Baldwin Avenue. Trustees named the building The Ford Miller Employment and Training Complex. Plans were begun to convert the building to a combination office and classroom building to house MTCC staff and students, the McDowell County JobLink Career Center and associated partners, and the McDowell County Employment Security Commission.

## 2008

The W. Harold Smith Building was completed and named for Harold Smith, a local businessman who left his estate to further educational opportunities for young adults from McDowell County. A trust established in his name has donated over \$825,000 to the college during the last decade, including well in excess of \$100,000 for this building. Scholarships from this trust have also benefitted individual students attending curriculum classes at the college.

## 2009

The Ford Miller Employment and Training Center was completed and began operations in late September of this year.

## 2010

The Academic Resource Center (ARC)

opened on the upper level of the Library adjacent to the Student Enrichment Center to offer students tutoring, computer access, instructional support, test proctoring and a variety of other academic resources. Printers and study tables are also available.

#### **2014**

Dr. Bryan W. Wilson, President, and the Board of Trustees, in conjunction with the McDowell County Board of Commissioners, dedicated the Universal Advanced Manufacturing Center (UAMC), providing new and enlarged classrooms and shop areas for Machining, Electrical/Electronics, Welding, Industry Training and related programs.

#### **2016**

Dr. John Gossett, who had been serving as the college's Vice-President for Learning and Student Services, was appointed President in May and assumed his new duties on August 1.

#### **2017**

Throughout the 2017-2018 academic year, the College celebrated the 50th Anniversary of its establishment as an independent institution of what is now known as the North Carolina Community College System. A special celebration was held in conjunction with the SGA's Fall Festival in October and included the opening of a historical photo exhibit in the main administration building.

#### **2020**

Dr. John Gossett resigned when he was named the new President of AB-Tech in Asheville, NC. Mr. Ryan Garrison, Vice-President for Finance and Administration at McDowell Tech was named MTCC's Interim President.

#### **2021**

In January, 2021, Dr. Brian S. Merritt became the sixth president of McDowell Technical Community College.



# General Information

## ***Accreditation***

McDowell Technical Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award associate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of McDowell Technical Community College.

The MTCC Health Information Technology program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

## ***Mission***

MTCC enriches our community with access to student-centered, affordable, high-quality, lifelong learning opportunities that promote workforce development.

## ***Graduate Competencies***

McDowell Technical Community College strives to prepare graduates to:

1. Listen and communicate effectively, orally and in writing.
2. Demonstrate competence in reading.
3. Perform effectively in their chosen occupations.
4. Demonstrate positive interpersonal life skills.
5. Demonstrate quantitative competencies.
6. Demonstrate skills in using a personal computer.
7. Use information to analyze problems and make logical decisions.

## ***General Responsibilities***

Students are expected to acquaint themselves with and observe College regulations and policies contained in the *Catalog and Student Handbook* and all announcements made by administrative officials.

## ***Academic Year***

McDowell Technical Community College operates on the semester system (Fall, Spring and Summer).

Classes are regularly scheduled Monday through Friday for the day and evening curriculum classes. Weekend curriculum classes may also be offered on an occasional basis. Holidays, days for registration, and the first and last days for classes in each semester are indicated on the academic calendar.

## ***Hours of Operation***

In general, the College will offer day and night curriculum classes in technical, vocational, general education and college transfer programs from approximately 8:00 am to 10:30 pm Monday through Friday. Occasionally, classes will begin or end an hour earlier or later than these parameters. Weekend and summer semester classes may vary from this schedule.

The administrative offices of the College are open 8:00 am to 5:00 pm Monday through Thursday, and 8:00 am to 4:30 pm Friday.

The Switchboard is open from 8:00 am to 5:00 pm Monday through Thursday and 8:00 am to 4:30 pm on Friday.

The Academic Resource Center is open from 8:00 am to 7:00 pm Monday through Thursday and 8:00 am to 2:00 pm on Friday.

The Library is open from 8:00 am to 7:00 pm Monday through Thursday and 8:00 am to 1:00 pm on Friday.

Continuing Education classes will be offered across campus and throughout the community at varying times throughout the week. Consult the Schedule of Classes for Continuing Education class times.

Hours of operation for the annual Fire and Rescue College will be mailed to applicants several weeks prior to the event.

## ***Inclement Weather***

At times, McDowell Technical Community College curriculum and/or continuing education classes may be delayed or canceled due to inclement weather, natural disaster, or other emergency. The President is responsible for making the decision of whether to delay or cancel classes and for communicating this decision to the Director of External Relations for communication to the news media and to the college switchboard.

When it becomes necessary to discontinue or delay classes, an announcement will be made to local and regional radio and television stations. Morning announcements will be made about 6:15 am for day classes. All day classes will operate according to the announcement and will either be canceled for the day or begin at 10:00 am.



Should it become necessary to change from the delayed class schedule to class cancellation, the stations will be notified by 8:00 am.

Announcements concerning evening classes will be made over the same stations during the afternoon, hopefully by 3:00 pm. There is no abbreviated schedule for evening classes.

Students may call the college if they cannot receive one of the radio or television stations listed. If the college is closed, students may access a recorded closing/delay message by calling the College at 659-0419. Announcements will also be listed on Facebook and at [www.mcdowelltech.edu](http://www.mcdowelltech.edu).

Students, faculty and staff may also sign up for text alerts from the College to receive inclement weather announcements. Log onto the MTCC website at [www.mcdowelltech.edu](http://www.mcdowelltech.edu) and visit the section labeled "McDowell Tech Text Alerts" to sign up.

During inclement weather, students and staff members may listen to these stations for news about school delays or class cancellation:

#### **Radio**

WWNC (570 AM) Asheville  
WBRM (1250 AM) Marion  
WTOE (1470 AM) Spruce Pine  
WMNC (92.1 FM) Morganton  
WKSF (99.9 FM) Asheville  
WQNQ (104.3 FM), Asheville/Old Fort

#### **Television**

WLOS (Ch. 13, Asheville)  
WBTB (Channel 3, Charlotte)  
WSOC (Ch. 9, Charlotte) WYFF (Ch. 4, Greenville)  
WSPA (Ch. 7, Spartanburg)

*Class makeup:* The college recognizes its obligation to deliver the instructional services for which students pay tuition and fees. For this reason, all missed classes should be re-scheduled or made up in a manner determined by the Vice-President for Learning and Student Services. The final attendance report must document how cancelled classes were made up.

### ***Housing***

McDowell Technical Community College is a commuter institution and does not provide living accommodations for students. However, if a student desires to live in the community while attending classes, the Student Services Office will refer him/her to appropriate resources for assistance in locating suitable housing.

### ***Parking***

Parking facilities are available for students, visitors, staff and faculty. Handicapped parking facilities are available and are appropriately designated across campus. Students are required to purchase a parking permit at a cost of \$5 each semester they attend. These passes should be displayed in a prominent area on the windshield of the vehicle. Faculty and staff are also required to have a parking permit in order for their vehicles to park in the designated staff parking areas. Unauthorized vehicles will be towed away at the owner's expense.

### ***Food Services***

A short order café is located in the Student Commons. The café serves breakfast, lunch, and dinner Monday through Thursday. The cafe may be closed on certain occasions when the college is holding special events in the Student Commons or when class is not in session. Snacks and soft drinks may also be purchased from vending machines in the Student Commons.

### ***Smith Academic Resource Center***

Library Services encompasses the Library and audiovisual materials and equipment. Library staff members are available to help students and faculty as well as members of the community with library needs. The MTCC library hours are posted on the library entrance. The MTCC library can be accessed through the MTCC website by clicking on the "Services" tab on college website and then choosing Library from the drop-down menu.

A wide range of library resources is available to support the curriculum programs of the College. The book collection includes more than 13,000 volumes of current reference materials, college transfer, technical and vocational materials. Approximately 35 periodicals and newspapers are received throughout the year. Patrons are welcome to recommend materials for purchase.

Audiovisual materials are available for classroom instruction. Audiovisual equipment is maintained in most of

the classrooms on campus. The online card catalog (SirsiDynix iLink) provides easy access to Library materials and makes the check-out process smooth, quick and accurate.

Additional library resources include Interlibrary Loan through online Computer Library Center (OCLC) and Community College Libraries in North Carolina (CCLINC). Online databases include SIRS Researcher, Renaissance and Government Reporter; and Facts on File: Issues & Controversies. Computers are available for Internet research, including NC LIVE. NCLIVE's online collection includes access to 1.4 billion full-text articles, e-books, streaming videos, digitized newspapers, language learning tools and more. Remote access to the NC LIVE, SIRS, & FOF databases is available to online students through Open LMS. Other students need a library card to get the passwords/urls for the databases. A library card is needed by all library patrons to use the computers in the library and to check out library materials.

### ***Use of Telephones***

Students will not be called out of class to receive personal calls except in the case of an emergency.

### ***Cell Phones and Beepers***

Cellular telephones, beepers, two-way radios and similar devices may cause distraction and/or disruption of the learning environment. Students are to keep all such devices turned off during class and while in the MTCC Library. Students with extenuating circumstances must seek permission of the individual instructor or library staff member to have such devices turned on in these locations.

### ***Technology***

McDowell Technical Community College maintains multiple computer labs for instructional purposes in curriculum areas such as Accounting, Advertising & Graphic Design, Business Administration, Computer Information Technology, Health Information Technology, Nursing, Office Systems, Photography and Web Technology. The Graphic Design and Photography labs utilize Macintosh computers with associated software while other labs contain PC workstations running Microsoft Windows with associated software. Printing is also available in labs for instructional purposes.

The Academic Resource Center (ARC) lab is available for student use. It is located in the Smith Academic Resource Center in the Cedar Building.

Wi-Fi is available across campus for guest use. No login is necessary, but users must read and accept the campus policy to access the internet. Violation of this policy could result in revocation of computer use privileges on campus.

### ***Children On Campus***

It is College policy that children may not accompany students to class. Children who are brought to campus for other reasons must be closely supervised by a responsible adult and may be asked to leave if they become disruptive. Children enrolled in the MTCC Child Development Center are allowed on campus when supervised by College staff.

### ***Child Development Center***

The McDowell Technical Community College Child Development Center is a 5-star center providing quality care for children 6 weeks to 5 years of age. We provide care during the day with full-time or part-time slots to students, MTCC/MEC faculty & staff and the community. The Center is open as follows from 7:30 am to 5:30 pm Monday through Thursday, and from 7:30 am to 4:30 pm on Friday. Financial assistance is available to qualifying applicants. For additional information, fee schedules and application materials, please contact MTCC Child Development Center at 828-652-0637.

### ***Dress***

Students are to exercise judgment in dressing appropriately for classes or laboratory work. Students in certain curriculum programs may be required to wear particular items of clothing for safety and/or designation of their course of study. Refer to the Student-Oriented Policies and Procedures section of the Catalog for more details.

### ***Noise***

Students are to be considerate of classes which are in session. Excessive noise will not be tolerated within administrative

or classroom buildings.

### ***Smoking Facilities***

McDowell Technical Community College is a tobacco-free campus. Smoking/tobacco use is not permitted on campus. Students who violate this policy will receive a verbal warning by College staff for their first offense. Continued use of tobacco products after this warning is considered a violation of this policy and appropriate disciplinary action will be taken.

### ***Bulletin Boards***

Students may post notices on bulletin boards subject to the approval of the Student Government Advisor in the Student Services Office.

### ***Lost and Found***

All lost or found items should be reported to the receptionist at the information desk in Building 11 (Cedar) 828-652-6021. The receptionist will post information on items which have been turned in.

### ***Social Media Guidelines***

The purpose of McDowell Technical Community College (MTCC) social networking sites such as Facebook, Twitter, and YouTube is to support the College's mission, programs, services, and events by offering news and information to the students, faculty, staff, and friends of MTCC. Social media sites are valuable as they provide a method for disseminating information. These procedures are also subject to the addition of other forms of social media. MTCC encourages feedback and comments from prospective students, current students, alumni, faculty, staff, and members of the community. MTCC remains committed to maintaining these sites as safe and family-friendly forums for sharing information.

Guidelines are provided in order to protect the College's reputation and image. The establishment of guidelines ensures information follows the same high standards as printed and web publications.

In an effort to maintain a positive environment for MTCC website visitors, MTCC reserves the right to remove or block posts, users, or any content from official college-sponsored pages.

MTCC expects users to comply with the social website's terms of service.

- Facebook Statement of Rights and Responsibilities
- Instagram Terms of Service
- Twitter Terms of Service
- YouTube Terms of Service
- WordPress Terms of Service

### ***Social Media Guidelines for Students***

Online behavior that violates the college's Student Code of Conduct (pg. 61) or the Appropriate Use of Computing Resources Policy which is brought to the attention of the Vice President of Learning and Student Services, will be treated as any other violation of the Student Code of Conduct.

The following types of content are prohibited from the MTCC social networking sites:

1. Derogatory language or demeaning statements about or threats to any third party;
2. Lewd, indecent, or incriminating images or information depicting hazing, sexual harassment, vandalism, stalking, underage drinking, illegal drug use, or any other inappropriate behavior or inappropriate language;
3. Content that violates local, state or federal law;
4. Online gambling;
5. Content that harasses any third party or personal attacks of any kind;
6. Selling goods or services for personal financial profit;
7. Comments or posts that are unrelated to MTCC;
8. Spam;
9. Infringement on copyrights or trademarks; and/or

10. Offensive comments that target or disparage any ethnic, racial, religious, or other group of people.

If you have questions or concerns about a post or comment, contact the Director of Communications. If a sanctioned student club or organization wishes to create a social media web page, the faculty advisor must follow the procedures outlined under Social Media Guidelines for Employees in the MTCC policy and procedure manual.

**Note: Refer to Individual Program handbook for potentially more stringent policy and consequences.**

### ***Sexual Misconduct, Dating Violence, Domestic Violence and Stalking Policy***

McDowell Technical Community College provides and is committed to maintaining programs, activities, and an educational and work environment founded on civility and respect, where no one is unlawfully excluded from participation in, denied the benefits of, or subjected to discrimination in any College program or activity on the basis of sex.

Sexual Misconduct, dating violence, domestic violence, and stalking are forms of sex discrimination that may deny or limit an individual's ability to participate in or benefit from College programs or activities and thus are inconsistent with the values and standards of the College community; incompatible with the safe, healthy environment that the College community expects and deserves; and will not be tolerated.

It is the policy of the College to provide educational, preventive, and training programs regarding sexual misconduct, dating violence, domestic violence, and stalking; encourage reporting of these behaviors; take appropriate action to prevent incidents from denying or limiting an individual's ability to participate in or benefit from the College's programs; make available timely services for those who have been affected; and provide prompt and equitable methods of investigation and resolution to stop discrimination, remedy any harm, and prevent its recurrence.

The College is committed to fostering a community that promotes timely and fair resolution of sexual misconduct, dating violence, domestic violence, and stalking allegations. To that end, the College has appointed a Title IX Coordinator to oversee the investigation and resolution of such allegations and has adopted investigation and resolution procedures. Any allegation of sexual misconduct, dating violence, domestic violence, or stalking involving any member of the College community, occurring on College property, and/or occurring off of College property (if the conduct giving rise to the allegation is related to the College's programs or activities) will be investigated by the College's Title IX Coordinator pursuant to the appropriate procedures.

The Title IX Coordinator is Breanna Wilson, Human Resource/ Business Office Manager, who can be reached at 828-652-0618.

# McDowell Technical Community College

## Performance Measures and Standards for Performance Funding

Last revised July 2021 from the 2021 *Performance Measures for Student Success* report by NCCCS.

Measures A, B, C, D, E, F, and G, are required for performance funding.

An asterisk “\*” indicates that number is too small to report without violating students’ privacy. A minimum of 20 students is required for a reportable sample size

Measure	Description	Standard(s)	System Average Performance	MTCC Performance
<b>A. Basic Skills Student Progress</b>	Percentage of Periods of Participation (PoP) with at least one Measurable Skill Gain (MSG).	Excellence Level: 42.5% Baseline: 15.7%	34.4%	33.6%
<b>B. College-Level English Success</b>	Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit-bearing English course with a “C” or better within three years of their first fall term of enrollment.	Excellence Level: 70.4% Baseline: 47.1%	62.0%	77.9%
<b>C. College-Level Math Success</b>	Percentage of first-time Associate Degree seeking and transfer pathway students passing a credit-bearing Math course with a “C” or better within three years of their first fall term of enrollment.	Excellence Level: 54.5% Baseline: 29.9%	45.2%	63.7%
<b>D. First Year Progression</b>	Percentage of first-time fall credential-seeking students who graduate prior to or enroll in postsecondary education during the subsequent fall term.	Excellence Level: 71.8% Baseline: 56.8%	66.2%	63.5%
<b>E. Curriculum Completion</b>	Percentage of first-time fall credential-seeking curriculum students who have graduated, transferred, or are still enrolled during the fourth academic year with 42 successfully completed non-developmental hours.	Excellence Level: 61.3% Baseline: 43.1%	54.1%	7% CC Graduate and Univ. Transfer 19% CC Graduate, Not Univ. Transfer 13% Univ. Transfer, Not CC Graduate 13% Retained (42 HRS), Did not CC Graduate or Univ. Transfer 52.3% Graduate, Transfer, or Retained (42 HRS)
<b>F. Licensure and Certification Passing Rate</b>	Weighted index score of first-time test-taker results on licensure and certification exams. Exams included in this measure are state mandated exams which candidates must pass before becoming active practitioners. Weights are based on the tier associated with the related instructional program.	Excellence Level: 1.09 Baseline: 0.75	1.00 Weighted Index Score	1.00 Weighted Index Score  BLET * Cosmetology * Esthetics * Pract. Nursing 0.89 Nurse Aide 0.96 Reg. Nursing * EMT-B * EMT-A * EMT-P *

Measure	Description	Standard(s)	System Average Performance	MTCC Performance
G. College Transfer Performance	Among community college Associate Degree completers and those who have completed 30 or more articulated transfer credits who subsequently transfer to a four-year university or college during the fall semester, the percentage who graduate prior to or remain enrolled at any four-year college or university the subsequent fall semester	Excellence Level: 91.1% Baseline: 79.4%	87.8%	89.9%

**College Summary:**

Two performance measures were met or exceeded, Measure B – College-Level English Success, Measure C – College-Level Math Success. Two performance measures were Above the College Average, but Below the Excellence Level, and three measures were Above the Baseline Level, but Below the College Average.

*Every three years, a committee that is inclusive of college leaders; subject matter experts; and research and assessment professionals are appointed to review the measures and recommend deletions, revisions, and additions.*

# Degrees, Diplomas & Certificates

Program Name	Program Code	CIP Code
<b>Accounting</b>		
<b><i>Accounting</i></b>		
Accounting-Associate Degree	A25800A	52.0304
Accounting-Certificate	C25800A	52.0304
Accounting-Certificate/Pathway	C25800AP	52.0304
<b><i>Accounting and Finance</i></b>		
Accounting/Finance-Associate Degree	A25800B	52.0304
Accounting/Finance-Certificate	C25800E	52.0304
<b><i>Accounting-Income Tax Preparation</i></b>		
Accounting-Income Tax Preparer-Certificate	C25800C	52.0304
<b><i>Accounting-Other</i></b>		
Accounts Payable, Accounts Receivable, Bookkeeping-Certificate	C25800B	52.0304
Payroll Accounting Clerk-Certificate	C25800D	52.0304
<b>Advertising and Graphic Design</b>		
Advertising and Graphic Design-Associate Degree	A30100	50.0402
Advertising and Graphic Design-Diploma	D30100	50.0402
Advertising and Graphic Design-Certificate	C30100	50.0402
Advertising and Graphic Design-Certificate/Pathway	C30100P	50.0402
<b>Air Conditioning, Heating &amp; Refrigeration Technology</b>		
Air Conditioning, Heating & Refrigeration Technology- Associate Degree	A35100	47.0201
Air Conditioning, Heating & Refrigeration Technology-Diploma	D35100	47.0201
Air Conditioning, Heating & Refrigeration Technology-Certificate/Pathway	C35100P	47.0201
Air Conditioning, Heating & Refrigeration Technology-Certificate	C35100	47.0201
<b>Applied Engineering Technology</b>		
Applied Engineering Technology- Associate Degree	A40130	15.0001
Applied Engineering Technology-Diploma	D40130	15.0001
Applied Engineering Technology-Certificate	C40130	15.0001
Applied Engineering Technology-Certificate/Pathway	C40130P	15.0001
<b>Basic Law Enforcement Training</b>		
Basic Law Enforcement Training-Certificate	C55120	43.0107
<b>Business Administration</b>		
<b><i>Business Administration</i></b>		
Business Administration-Associate Degree	A25120B	52.0201
Business Administration-Certificate/Pathway	C25120P	52.0201
<b><i>Business Administration-Marketing &amp; Retail</i></b>		
Business Administration - Marketing & Retailing-Associate Degree	A25120M	52.0201
Business Administration - Marketing & Retailing-Certificate/Pathway	C25120FP	52.0201
<b><i>Business Administration-Operations Management</i></b>		
Business Administration - Operations Management-Associate Degree	A25120O	52.0201
Business Administration - Operations Management Certificate	C25120O	52.0201
Business Administration - Operations Management Certificate/Pathway	C25120OP	52.0201
<b>College Transfer</b>		
Associate in Arts	A10100	24.0101
Associate in Arts-Certificate/Pathway	P1012C	24.0101
Associate in Arts in Teacher Preparation	A1010T	24.0101
Associate in Science in Teacher Preparation	A1040T	24.0101
Associate in Science	A10400	24.0101
Associate in Science-Certificate/Pathway	P1042C	24.0101
Associate in Engineering	A10500	14.0102
Associate in Engineering-Certificate/Pathway	P1052C	14.0102
Associate in General Education Nursing	A10300N	51.1105
Associate in General Education Nursing-Certificate/Pathway	P1032C	51.1105



## **Computer Integrated Machining**

Computer-Integrated Machining-Associate Degree	A50210	48.0510
Computer-Integrated Machining-Diploma	D50210	48.0510
Computer-Integrated Machining-Certificate/Pathway	C50210P	48.0510
Computer-Integrated Machining-Certificate	C50210C	48.0510
Computer-Integrated Machining-Certificate	C50210D	48.0510
Computer-Integrated Machining-Certificate	C50210M	48.0510

## **Cosmetology**

Cosmetology-Associate Degree	A55140	12.0401
Cosmetology-Diploma	D55140	12.0401
Cosmetology-Certificate/Pathway	C55140P	12.0401
Cosmetology Instructor-Certificate	C55160	12.0413

## **Cyber Crime Technology**

Cyber Crime Technology-Associate Degree	A55210	43.0403
Cyber Crime Technology-Certificate	C55210A	43.0403
Cyber Crime Technology-Certificate	C55210B	43.0403
Cyber Crime Technology-Certificate/Pathway	C55210AP	43.0403
Cyber Crime Technology-Certificate/Pathway	C55210BP	43.0403

## **Early Childhood Education**

### ***Early Childhood Education***

Early Childhood Education-Career Associate Degree	A55220C	13.1210
Early Childhood Education-Licensure	A55220L	13.1210
Early Childhood Education-Non-Licensure	A55220N	13.1210
Early Childhood-Career Diploma	D55220C	13.1210
Early Childhood-Certificate	C55220C	13.1210
Early Childhood Education-Certificate/Pathway	C55220P	13.1210

### ***Early Childhood-Special Education***

Early Childhood Special Education-Certificate	C55220S	13.1210
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### ***Early Childhood Administration***

Early Childhood Administration Certificate	C55850	13.1210
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### ***Infant/Toddler Care***

Infant/Toddler Care-Certificate	C55290	13.1210
Infant/Toddler Care-Certificate/Pathway	C55290P	

### ***School-Age Education (not accepting new students)***

School-Age Education-Associate Degree	A55440	13.1202
School-Age Child-Diploma	D55440	13.1202
School-Age Child-Certificate	C55440	13.1202

## **Electrical System Technology**

Electrical System Technology-Associate Degree	A35130	46.0302
Electrical System Technology-Diploma	D35130	46.0302
Electrical System Technology-Certificate/Pathway	C35130P	46.0302

## **Emergency Management**

### ***Emergency Management***

Emergency Management-Associate Degree	A55460	43.0302
Emergency Management-Certificate	C55460E	43.0302
Emergency Management-Certificate/Pathway	C55460EP	43.0302

### ***Emergency Management-Criminal Justice***

Emergency Management-Criminal Justice-Certificate	C55460C	43.0302
Emergency Management-Criminal Justice-Certificate/Pathway	C55460CP	43.0302

### ***Emergency Management-Fire Protection***

Emergency Management-Fire Protection-Certificate/Pathway	C55460FP	43.0302
Emergency Management-Fire Technology-Certificate	C55460F	43.0302



## **Emergency Medical Science**

Emergency Medical Science – Associate Degree	A45340A	51.0904
Emergency Medical Science – Paramedic Bridge Program	A45340BR	51.0904
Emergency Medical Science – Certificate	C45340	51.0904
Emergency Medical Science – Certificate/Pathway	C45340P	51.0904

## **Esthetics Technology**

Esthetics Technology-Certificate	C55230	12.0409
Esthetics Technology-Certificate/Pathway	C55230P	12.0409
Esthetics Technology Instructor-Certificate	C55270	12.0413

## **General Education**

General Education-Associate Degree	A10300	24.0199
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## **General Occupational Technology**

General Occupational Technology-Associate Degree	A55280	24.0102
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## **Healthcare Management Technology**

Healthcare Management Technology-Associate Degree	A25200M	51.0705
Healthcare Management Technology – Long-Term Care-Associate Degree	A25200L	51.0705
Healthcare Management Technology – Long-Term Care – Certificate	C25200M	51.0705
Healthcare Management Technology – Receptionist-Certificate	C25200L	51.0705
Healthcare Management Technology – Receptionist-Certificate/Pathway	C25200P	51.0705

## **Health Information Technology**

### ***Health Information Technology***

Health Information Technology-Associate Degree	A45360	51.0707
Health Information Technology-Diploma	D45360	51.0707
Health Information Technology-Certificate/Pathway	C45360P	51.0707
Health Information Technology-Certificate/Pathway	C45360BP	51.0707

### ***Health Information Technology-Health Care Informatics***

Health Information Technology-Health Care Informatics-Certificate	C45360IF	51.0707
Health Information Technology-Health Care Informatics-Certificate/Pathway	C45360IP	51.0707

### ***Health Information Technology-Other***

HIT-Medical Billing and Coding-Certificate	C45360B	51.0707
HIT-Release of Information-Certificate	C45360A	51.0707

## **Information Technology**

### ***Information Systems***

Information Systems Advanced	C25590B	11.0103
Information Systems	C25590A	11.0103
Information Systems	A25590	11.0103
Information Systems	C25590AP	11.0103
Information Systems - Advanced	C25590BP	11.0103
(Information Systems)	A25590A	11.0103

### ***Software and Web Development***

Software & Web Design Advanced	C25590FP	11.0103
Software and Web Design	C25590EP	11.0103
Software & Web Development	C25590E	11.0103
Software & Web Development Advanced	C25590F	11.0103
(Software and Web Development)	A25590C	11.0103

### ***Web Administration***

Web Admin & Design	C25590GP	11.0103
Web Admin & Design Advanced	C25590HP	11.0103
(Web Administration and Design)	A25590D	11.0103
Web Administration & Design Advanced	C25590H	11.0103
Web Administration & Design	C25590G	11.0103

## Manicuring/Nail Technology

Manicuring/Nail Technology-Certificate	C55400	12.0410
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## Mechatronics Engineering Technology

Mechatronics Engineering Technology-Associate Degree	A40350	15.0407
Mechatronics Engineering Technology-Diploma	D40350	15.0407
Mechatronics Engineering Technology-Certificate	C40350	15.0407
Mechatronics Engineering Technology-Certificate/Pathway	C40350P	15.0407

## Nursing

### **Associate Degree Nursing**

Associate Degree Nursing	A45110	51.3801
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### **Practical Nursing**

Practical Nursing-Diploma	D45660	51.3901
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### **Nurse Aide**

Nurse Aide-Diploma	D45970	51.3902
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Nurse Aide-Certificate	C45840	51.3902
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Nurse Aide-Certificate/Pathway	C45840P	51.3902
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## Office Administration

### **General Office Administration**

General Office Administration-Associate Degree	A25370A	52.0204
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General Office Administration-Diploma	D25370A	52.0204
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General Office Administration-Certificate	C25370A	52.0204
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Office Administration-Certificate/Pathway	C25370P	52.0204
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### **Office Administration-Other**

Office Finance-Associate Degree	A25370B	52.0204
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Office Software-Associate Degree	A25370C	52.0204
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## Photographic Technology

Photographic Technology-Associate Degree	A30280	10.0201
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Photography Technology-Certificate	C30280	10.0201
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Photographic Technology-Certificate/Pathway	C30280P	10.0201
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## Transportation

### **Transportation: Automotive Systems Technology**

Automotive Systems Technology-Associate Degree	A60160	47.0604
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Automotive Systems Technology-Diploma	D60160	47.0604
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Automotive Systems Technology-Certificate	C60160	47.0604
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Automotive Systems Technology-Certificate/Pathway	C60160P	47.0604
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## Welding Technology

Welding Technology-Diploma	D50420	48.0508
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Welding Technology-Certificate	C50420	48.0508
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Welding Technology-Certificate/Pathway	C50420P	48.0508
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## Adult High School

Adult High School Diploma
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## Adult High School Equivalency (GED)

Adult High School Equivalency Certificate
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## Continuing Education Course Completion

Certificate of course completion
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# *Admissions*

As a member of the North Carolina Community College System, McDowell Technical Community College operates under an “open door” admissions policy. Open door admissions means, “Any person who is a high school graduate or at least 18 years old has the opportunity to pursue the various educational opportunities that are offered by institutions in the system.” Special admission requirements, such as educational qualifications, physical abilities, assessment scores and State Board policy restrictions, are attached to certain curriculums. Applicants scoring below specified minimums on entrance exams will be counseled and required to enroll in classes designed to eliminate their admission deficiencies.

The following are the general admission requirements. However, some curricula have special requirements for admission. Consult the section of this catalog which describes the particular curriculum in which you wish to enroll for a list of the exceptions or requirements.

The College has seven departments:

**Business Technologies Department**  
**College Transfer / General Education Department**  
**Continuing Education Department**  
**Correctional Education Department**  
**Health Science Department**  
**Human & Public Services Department**  
**Vocational Department**

## *Curriculum Admissions*

Curriculum classes are offered in all departments except the Continuing Education Department. Therefore, admission to all departments except the Continuing Education Department are coordinated through and conducted in the Student Services Office. For curriculum admissions, an applicant must be a graduate of an accredited high school or must have been awarded a high school equivalency certificate. Exceptions may be made for Career and College Promise students, as well as individuals whose age and maturity make success likely.

## *Continuing Education Admissions*

In general, Continuing Education courses are open for enrollment to persons 16 years of age or older, or those whose high school graduating class has graduated. However, because some specialty and advanced courses may be more difficult and require a greater degree of preparation, potential enrollees should be aware of the nature of the course requirements to determine their possible success in those courses.

To meet admissions requirements for certain specialized courses such as Fire Service, Law Enforcement or Management Development Training, potential students must be employed by or recommended by one of the requesting training agencies.

## *Special Admissions*

### *Provisional Admissions*

Students who have applied too late to secure all supporting documents for admission to a particular semester may be admitted as provisional students. In such cases, all requirements for regular admission should be completed within the first semester of attendance.

Students who fail to secure all supporting documents or satisfy requirements for official admission to the College may not be eligible for financial assistance and will not be allowed to enroll the next semester.

### *Admission of Special Students*

A special student is defined as one who is enrolled in curriculum credit courses, but who is not working toward a degree or diploma. Special students may register to take courses for which they have met prerequisites, provided that such registration does not pre-empt students enrolled in a degree, diploma, or certificate program.

A student may take a maximum of 15 hours in any one semester while classified as a special student. When a student reaches 20 cumulative hours, he/she will be counseled to declare a major or curriculum preference.

## *How to Enroll in a Curriculum Program*

### •STEP #1.

Complete your NC Residency!

All applicants, excluding high school students enrolling in Career and College Promise (CCP), must complete the online North Carolina Residency Determination Service questionnaire. Applicants will be provided a Residency Certification Number (RCN) which is a required field on the McDowell Technical Community College (MTCC) Application.

Please have the following items available before proceeding to the NC Residency Website:

- NC Driver License / NC ID
- Your tax information and/or your parents tax information, if you are under 25 years old
- Vehicle License & Registration Information
- Military Documentation (Benefits info or DD214)
- Foreign / Immigrant Documents

When you are ready to complete your Residency Determination questionnaire, please go to [www.ncresidency.org](http://www.ncresidency.org).

**If you receive a notification of OUT for residency purposes and you feel you should be an In state resident, action is required. Please call RDS through their contact information below.**

If you need assistance completing your Residency Determination, please contact the North Carolina Education Assistance at:

[rdsinfo@ncresidency.org](mailto:rdsinfo@ncresidency.org)

844.319.3640 (Toll-Free)

919.835.2290 (Local)

919.835.2427 (Fax)

•STEP #2. Complete your Career Assessment on the CFNC website at [www.cfnc.org](http://www.cfnc.org).

(Click on "Try the Career Interest Profiler.")

•STEP #3. Complete your McDowell Tech application!

Once you have completed your Residency Determination you will then need to complete the MTCC application found at [www.cfnc.org](http://www.cfnc.org). You will need to enter your RCN in the appropriate field in order to complete your application.

Please allow 24-48 hours for your application to be processed once you have submitted it.

You will not be able to submit your application until you have completed all of the required fields on the application. This will be evident by the check marks beside the section.

•STEP #4. Complete your Financial Aid application!

You can apply for federal and state grants at [www.fafsa.gov](http://www.fafsa.gov). The FAFSA may take up to 2 weeks to process and varies with each student. The MTCC Federal School Code = 008085. The McDowell Technical Community College scholarship application is available at [www.mcdowelltech.edu](http://www.mcdowelltech.edu).

If you need assistance on your Financial Aid application to the college, please contact our Financial Aid Office at:

Lisa Byrd

[ldbyrd98@go.mcdowelltech.edu](mailto:ldbyrd98@go.mcdowelltech.edu)

828.652.0624 (Office)

•STEP #5. Transcripts

All students seeking a degree, diploma, or certificate must submit an official copy of their high school transcript. Recent graduates will have the option to submit it to MTCC electronically via the College Application. Paper copies of transcripts must remain in a sealed envelope to be considered official. Official transcripts may also be received via electronic format to [admissions@go.mcdowelltech.edu](mailto:admissions@go.mcdowelltech.edu). College transcripts may be required depending on your program of study and/or if you are receiving Veteran Education Benefits. Processing times vary for each school.

•STEP #6. Meet with your Advisor to register!

Health Sciences Programs: Belinda Foster [bmfooster07@go.mcdowelltech.edu](mailto:bmfooster07@go.mcdowelltech.edu)

All Other Programs: Annie Duncan (Last Name A-M): [amduncan00@go.mcdowelltech.edu](mailto:amduncan00@go.mcdowelltech.edu)

Susan Long (Last Name N-Z): [sclong80@go.mcdowelltech.edu](mailto:sclong80@go.mcdowelltech.edu)

For questions, contact us at 828-652-0622 or 828-659-0444 or [admissions@go.mcdowelltech.edu](mailto:admissions@go.mcdowelltech.edu).

### ***Visiting Student Status***

A visiting student is defined as one who is a student in good standing at another institution of higher education. A visiting student may enroll at MTCC by completing an application and furnishing MTCC with a letter of permission and transcripts from the parent college (college at which the individual is a regular student).

Visiting students may register to take courses for which they have met prerequisites, provided that such registration does not pre-empt students enrolled in a degree, diploma, or certificate program.

### ***Admission of Minors***

“An applicant who is a minor between the age of 16 and 18 may be considered as a person with special needs and admitted to appropriate courses or programs, provided:

1) That the minor applicant has left the public schools no less than six calendar months prior to the last day of regular registration of the semester in the institution for which admission is sought: and

2) That the application of such minor is supported by a notarized petition of the minor’s parent, legal guardian, or other person or agency having legal custody and control of such minor applicant, which petition certifies the place of residence and date of birth of the minor, the parental or other appropriate legal relationship of the petitioner to the minor applicant, and the date on which the minor applicant left the public schools. However, all or any part of the six-month waiting period may be waived by the superintendent of the public schools of the administrative unit in which the applicant resides; and

3) That such admission will not pre-empt College facilities and staff to such an extent as to render the College unable to admit all applicants who have graduated from high school or who are 18 years of age or older.

It shall be the policy of the State Board of Education and the Community College System to encourage young people to complete high school before seeking admission to community colleges or technical institutes.”

### ***McDowell Early College***

McDowell Early College (MEC) is a small, personalized high school located on the McDowell Technical Community College Campus. MEC is an exciting partnership between McDowell County Schools and McDowell Technical Community College that offers unique educational opportunities designed for a diverse group of students. The mission of MEC is to provide a smaller academic environment that fosters growth and success to prepare students for their future by developing relationships, responsibility, and respect through relevant and rigorous coursework.

McDowell Early College students earn an Associate’s degree or two years of transferable credit in addition to their high school diploma. All MEC students are offered a schedule that meets individual needs, abilities and interests. The school, provides ongoing academic support in a small school setting to help students meet the high expectations of the Early College Model. Our focus is college readiness. McDowell Early College strives to redefine teaching and learning by using innovative best practices.

For more information, contact the MEC principal at 659-0411.

### ***McDowell Academy for Innovation***

McDowell Academy for Innovation (MAI) is a small Cooperative Innovative High school, created in 2018, where students take college classes through a partnership with McDowell Technical Community College (MTCC). Students are eligible to earn a variety of STEM-focused degrees, diplomas, or certificates. At McDowell Academy for Innovation, every student will experience personalized education and graduate ready for college and career with a network of connections and experiences preparing them for their role in a global economy.

McDowell Academy for Innovation students earn an Associate’s degree or two years of transferable credit in addition to their high school diploma. All MAI students are offered a schedule that meets individual needs, abilities and interests. The school, provides ongoing academic support in a small school setting to help students meet the high expectations of the Early College Model.

For more information, contact the MAI principal at 652-1040.

### ***Enrollment Limitations***

Some curriculum programs have maximum student enrollment limitations and/or reserve space for currently enrolled students. Acceptance to most programs except Nursing and BLET will be on a first come, first served basis as evidenced by the receipt of qualified applications and payment of all appropriate fees.

Applicants who do not register and pay at established times may lose their position.

## ***Readmissions***

Students who have withdrawn in good standing, withdrawn while on probation, or who have been suspended for academic deficiencies should submit requests for readmission to the VP for Learning and Student Services. Consideration of requests for readmission of students who have withdrawn for these reasons will be made in light of the applicant's ability, evidence of growth and maturity, time elapsed since withdrawing and other extenuating circumstances. Additional consideration will be given to those who have completed course pre-requisites. Enrollment limits and class sequencing will also be considered in evaluating a request for readmission.

## ***Credit For Prior Learning***

### ***Credit by Examination***

A student may pass a specially prepared examination and receive credit for a course without having to do the normal course work. The student must enroll in the course and present evidence of his knowledge of the subject matter to the instructor prior to requesting credit-by-examination. The student must then present a Credit-by-Examination Request form to the instructor to begin the process. This form may be obtained in the Student Services Office.

If the student sufficiently passes the exam, he/she will receive a grade of "CR" which will be recorded on the transcript. The hours will be counted toward graduation, but will not be used in calculation of GPA.

A student may earn up to 20% of the course requirements for any curriculum through credit-by-examination.

### ***Articulation of Continuing Education Credit to Curriculum Credit***

In cases where the learning outcomes of a current, industry-recognized credential align with the learning outcomes of a curriculum course(s), credit may be given. Credit may be given for adequately documented and validated courses and industry-recognized credentials. These courses and credentials must be pre-approved by the Curriculum Committee and other subject matter experts based on content and outcomes. All academic program completion requirements must be met. Students should contact Student Services to determine if a credential qualifies for academic credit.

### ***Transfer From Other Schools***

Students who complete course work in another accredited college or university may apply for admission to MTCC. An application must be submitted and must include official transcripts for all institutions previously attended. Transfer applicants must have maintained a "satisfactory conduct" standing in the institution from which they are transferring to be accepted as a student in good standing at MTCC.

Academic work completed at accredited colleges and universities will be accepted at full value for required courses passed with the grade of "C." Courses taken at other institutions must have essentially the same content, contact hours and difficulty level as MTCC courses.

In order to receive a degree or diploma from MTCC, a student must earn 25% of his/her program in residence at MTCC with at least a "C" average (see graduation requirements).

Applicants who seek admission with advanced standing at MTCC should make an appointment with an admissions counselor to conduct a transcript evaluation. The admissions officer will conduct an official transcript evaluation when the applicant's admission file is complete. Requests for transfer credit should be made prior to the student's first term of enrollment. All transfer credit will be computed by the end of the first semester of the student's initial enrollment. The applicant can inquire in Student Services about all credits which transfer, preferably prior to enrollment.

A transfer student applying too late to complete pre-requisite requirements or pre-entrance requirements may be admitted as a provisional student. In such a case, all official transcripts must be submitted within the first semester of attendance. Students who neglect to turn in documentation will have a hold placed on their account with no release of transcript and no future registration until the official transcript is received.

A student on academic probation or suspended status from his/her last college or post-secondary institution may be admitted on a probationary basis and may be subject to academic progress regulations as defined in this catalog.

### ***Transfer of Credits from College Level Examination Program***

Credit may be allowed for up to 14 semester hours of college work based on appropriate scores on the CLEP General Examination where appropriate to the student's program of study. CLEP subject examinations are evaluated individually if applicable to the program of study.

### ***Transfer of Credits For Military Experience***

McDowell Technical Community College recognizes the unique nature of the military lifestyle and has committed itself to easing the transfer of relevant course credits, providing flexible academic residency requirements and crediting learning from appropriate military training and experience. Veterans of the Armed Forces automatically receive credit



for two semester hours of physical education credit. They are eligible to apply for curriculum credit in other areas based on prior education, training and experience. See the Veterans Certifying Official in the Student Enrichment Center for more information on credit for prior military experience.

### ***Transfer Within Curriculum***

McDowell Technical Community College will make all reasonable efforts to assist students who transfer from one curriculum to another within the College. Credits earned in one curriculum will transfer to another when appropriate.

A student's cumulative grade point average will be computed only from the credits transferred to the new curriculum. The appropriate Dean is the primary authority in determining transfer of credits from other schools and within curriculums. When there is doubt about the transfer of a credit, the appropriate Dean will consult the appropriate faculty members. If a student wishes to appeal the decision, the transcript will be referred to the VP for Learning and Student Services, whose decision will be final.

### ***Transfer To Other Schools***

The school to which a student wishes to transfer is responsible for deciding which credits from McDowell Technical Community College will be accepted. Most colleges and universities will accept MTCC credit for a course if a grade of "C" or higher is earned. Students planning to transfer to senior institutions should strongly consider enrolling in the MTCC College Transfer or General Education program. Transfer of credits from other areas may be limited. Students should seek the advice of a counselor in these instances.

There are many four-year schools which accept transfer technical courses from McDowell Technical Community College. Students should contact four-year schools of their choice to determine which courses will transfer.

### ***Procedures for Students Desiring a Second Degree***

1. The student desiring a second degree informs his/her advisor of his/her intent to receive two associate degrees prior to applying for graduation in Student Services.
2. The advisor evaluates the student's transcript to determine if additional semester hours/coursework is required.
3. The advisor documents his/her decision on the Dual Degree Approval Form provided by the student by completing the bottom section of the form.
4. The student applies for graduation in Student Services, submitting a separate application for each degree sought.
5. The Director of Admissions confirms that the Dual Degree Form and Student Data Change Form are completed. If not, he/she informs the student that they need to speak with their advisor and/or Veterans' Certifying Official before proceeding if he/she plans to receive VA educational benefits.

### ***False Information***

Furnishing false data for admission or failure to fully disclose requested information will be grounds for rejection of an application or dismissal of a student who has already been admitted to the college.

### ***Notification of Acceptance*** (\*Does not apply to students in Nursing.)

Applicants will be notified by mail of their admission status within one to four weeks after their application is received. Placement into a requested program may be determined at a later date. Official notification of acceptance or placement in a program is issued only by the Vice-President for Learning and Student Services or his/her designee. Applicants not placed in the program of their choice will be notified of this decision. An admissions interview may be requested prior to placement into any program. An applicant who changes his/her mailing address prior to registration for classes, who desires to apply for a different program, or wishes to enroll in a different semester than the one for which he/she originally applied should notify the Student Services Office immediately.

### ***Placement Information***

Placement into a specific course of study is based upon standards which will help to assure the applicant's success in that course of study.

An individual's educational background, interest, motivation, experience and aptitude will be considered when an application is submitted to the College.

Students may be required to take transition or corequisite courses based on the RISE placement model.

For placement into MAT 271 Calculus I, contact the Student Enrichment Center (659-0148 or 652-0632) for placement options.

## ***Career and College Promise***

Career and College Promise (CCP) provides seamless dual enrollment educational opportunities for eligible North Carolina high school students in order to accelerate completion of college certificates, diplomas, and associate degrees that lead to college transfer or provide entry-level job skills.

### CCP Eligibility Requirements

#### **College Transfer Pathway** students must:

Be a high school junior or senior;  
Have a 2.8 or higher unweighted high school GPA OR demonstrate college readiness in reading, writing and math on a state-approved assessment (SAT, PSAT, ACT, Pre-ACT, NCDAP, RISE placement test, AP, IB, Cambridge International Examination).

#### **Career and Technical Education Pathway** students must:

Be a HS junior or senior;  
Have a 2.8 or higher unweighted high school GPA, OR demonstrate college readiness in reading, writing and math on a state-approved assessment test (SAT, PSAT, ACT, Pre-ACT, NCDAP, RISE placement test, AP, IB, Cambridge International Examination), OR have a written recommendation from the high school principal/principal's designee. If entering CCP with a principal/designee recommendation, the recommendation must provide rationale for approving the waiver.

To maintain eligibility in either pathway, a student must maintain at least a college GPA of 2.0 after two college courses and continue to make progress toward graduation. A student who falls below a 2.0 GPA after completing two college courses will be required to meet with a College Liaison to develop a "Satisfactory Academic Progress" plan.

CCP Pathway options for the 2021-2022 academic year are outlined on the following pages.



# 2021-2022



**Career and College Promise (CCP) allows eligible high school students to enroll in community college courses!**

**Tuition is FREE!**

**Students declare pathways that lead to certificates, diplomas, or degrees, as well as providing entry-level job skills in specific areas.**

**Information may be obtained from the following website:  
[www.mcdowelltech.edu/CCP/](http://www.mcdowelltech.edu/CCP/)**

**For enrollment information contact**

**Betsy Ruiz  
at 828.652.0621**

**[bjruiz59@go.mcdowelltech.edu](mailto:bjruiz59@go.mcdowelltech.edu)  
[betsy.ruiz@mcdowell.k12.nc.us](mailto:betsy.ruiz@mcdowell.k12.nc.us)**

## College Transfer Pathways

### Associate in Arts P1012C Credit Hours

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3

(Pick one course)

COM 120	Interpersonal Communications	3
COM 231	Public Speaking	3

(Pick 2 courses)

ART 111	Art Appreciation	3
DRA 111	Theater Appreciation	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
ENG 241	British Literature I	3
ENG 242	British Literature II	3
MUS 110	Music Appreciation	3

(Pick 3 courses from 2 different disciplines)

ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

(Must take at least one course)

MAT 143	Quantitative Literacy	3
MAT 152	Statistical Methods I	4
MAT 171	Precalculus Algebra	4

(Pick 1 course)

BIO 111	General Biology I	4
CHM 151	General Chemistry I	4

(Other required)

ACA 122	College Transfer Success	1
<b>Total credit hours: 32-33</b>		

**\*\*SPA 111/181 and SPA 112/182 are accessible in this pathway**

## Associate in Engineering P1052C

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
(Pick 1 course)		
ART 111	Art Appreciation	3
COM 120	Interpersonal Communications	3
COM 231	Public Speaking	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
ENG 241	British Literature I	3
ENG 242	British Literature II	3
MUS 110	Music Appreciation	3
(Take 1 course)		
ECO 251	Princ of Microeconomics	3
(Take 2 courses)		
MAT 271	Calculus I	4
MAT 272	Calculus II	4
(Pick 2 courses)		
CHM 151	General Chemistry I	4
PHY 251	General Physics I	4
PHY 252	General Physics II	4
(Take 2 courses)		
EGR 150	Intro to Engineering	2
DFT 170	Engineering Graphics	3
(Other required)		
ACA 122	College Transfer Success	1

**Total credit hours: 34**

\*\*SPA 111/181 and SPA 112/182 are accessible in this pathway

## Associate Nursing P1032C

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
(Pick 1 course)		
ART 111	Art Appreciation	3
MUS 110	Music Appreciation	3
(Take 2 courses)		
PSY 150	General Psychology	3
PSY 241	Developmental Psychology	3
(Take 2 courses)		
BIO 168	Anatomy and Physiology I	4
BIO 169	Anatomy and Physiology II	4
(Other required)		
ACA 122	College Transfer Success	1

**Total credit hours: 24**

Foreign Language Not available in pathway

## Associate in Science P1042C

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3
(Pick one course)		
COM 120	Interpersonal Communications	3
COM 231	Public Speaking	3
(Pick one course)		
ART 111	Art Appreciation	3
DRA 111	Theater Appreciation	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
ENG 241	British Literature I	3
ENG 242	British Literature II	3
MUS 110	Music Appreciation	3
(Pick 2 courses from 2 different disciplines)		
ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3
(Pick 2 courses)		
MAT 171	Precalculus Algebra	4
MAT 172	Precalculus Trigonometry	4
MAT 271	Calculus I	4
MAT 272	Calculus II	4

(Pick 1 sequence of courses)		
BIO 111	General Bio I &	8
BIO 112	General Bio II	
CHM 151	Gen. Chem. I &	8
CHM 152	Gen. Chem. II	

(Other required)		
ACA 122	College Transfer Success	1

**Total credit hours: 35**

\*\*SPA 111/181 and SPA 112/182 are accessible in this pathway

**All College Transfer Courses are UGETC  
except ACA 122, DFT 170 and EGR 150**



## Associate in Arts Teacher Preparation P1012T

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3

(Pick one course)

COM 120	Interpersonal Communications	3
COM 231	Public Speaking	3

(Pick 2 courses)

ART 111	Art Appreciation	3
DRA 111	Theater Appreciation	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
ENG 241	British Literature I	3
ENG 242	British Literature II	3
MUS 110	Music Appreciation	3

(Pick 3 courses from 2 different disciplines)

ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

(Must take at least one course)

MAT 143	Quantitative Literacy	3
MAT 152	Statistical Methods I	4
MAT 171	Precalculus Algebra	4

(Pick 1 course)

BIO 111	General Biology I	4
CHM 151	General Chemistry I	4

(Take 3 courses)

SOC 225	Social Diversity	3
EDU 187	Teaching & Learning for All	4
EDU 216	Foundations of Education	3

(Other required)

ACA 122	College Transfer Success	1
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**Total credit hours: 42-43**

\*\*SPA 111/181 and SPA 112/182 are accessible in this pathway

## Associate in Science Teacher Preparation P1042T

ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3

(Pick one course)

COM 120	Interpersonal Communications	3
COM 231	Public Speaking	3

(Pick one course)

ART 111	Art Appreciation	3
DRA 111	Theater Appreciation	3
ENG 231	American Literature I	3
ENG 232	American Literature II	3
ENG 241	British Literature I	3
ENG 242	British Literature II	3
MUS 110	Music Appreciation	3

(Pick 2 courses from 2 different disciplines)

ECO 251	Principles of Microeconomics	3
ECO 252	Principles of Macroeconomics	3
HIS 111	World Civilizations I	3
HIS 112	World Civilizations II	3
HIS 131	American History I	3
HIS 132	American History II	3
POL 120	American Government	3
PSY 150	General Psychology	3
SOC 210	Introduction to Sociology	3

(Pick 2 courses)

MAT 171	Precalculus Algebra	4
MAT 172	Precalculus Trigonometry	4
MAT 271	Calculus I	4
MAT 272	Calculus II	4

(Pick 1 sequence of courses)

BIO 111	General Bio I &	
BIO 112	General Bio II	8
CHM 151	Gen. Chem. I &	
CHM 152	Gen. Chem. II	8

(Take 3 courses)

SOC 225	Social Diversity	3
EDU 187	Teaching & Learning for All	4
EDU 216	Foundations of Education	3

(Other required)

ACA 122	College Transfer Success	1
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**Total credit hours: 45**

\*\*SPA 111/181 and SPA 112/182 are accessible in this pathway

## Career & Technical Education Pathways

### \*Accounting C25800AP

	Credit Hours
ACC 120 Principles of Financial Account	4
ACC 121 Principles of Managerial Accounting	4
BUS 110 Introduction to Business	3
CIS 110 Introduction to Computers	3

**Total credit hours: 14**

### Advertising and Graphic Design C30100P

ART 121 Two- Dimensional Design	3
ART 171 Digital Design 1	3
ART 275 Introduction to Graphic Design	3
GRD 141 Graphic Design I	4
GRD 151 Computer Design Basics	3

**Total credit hours: 16**

### Air Conditioning, Heating, & Ref. C35100P

AHR 110 Introduction to Refrigeration	5
AHR 111 HVACR Electricity	3
AHR 112 Heating Technology	4
AHR 113 Comfort Cooling	4
AHR 160 Refrigerant Certification	1

**Total credit hours: 17**

### Applied Engineering Technologies C40130P

ATR 112 Introduction to Automation	3
DFT 119 B Basic CAD	2
ELC 131 Circuit Analysis	4
HYD 110 Hydraulics/Pneumatics I	3
ISC 112 Industrial Safety	2
MNT110 Intro to Maintenance Procedures	2

**Total credit hours: 16**

### Automotive Systems Technology C60160P

AUT 141 Suspension and Steering Systems	3
AUT 141A Suspension and Steering Systems Lab	1
AUT 151 Brake Systems	3
AUT 151A Brake Systems Lab	1
AUT 181 Engine Performance 1	3
AUT 181A Engine Performance 1 Lab	1
TRN 170 PC Skills for Transportation	2
TRN 180 Basic Welding for Transportation	3

**Total credit hours: 17**

### Business Administration C25120P

BUS 110 Introduction to Business	3
BUS 115 Business Law I	3
BUS 125 Personal Finance	3
BUS 137 Principles of Management	3
CIS 110 Introduction to Computers	3

**Total credit hours: 15**

### Business Admin.- Marketing & Retailing C25120FP

BUS 110 Introduction to Business	3
BUS 115 Business Law I	3
CIS 110 Introduction to Computers	3
MKT 120 Principles of Marketing	3
MKT 227 Marketing Applications	3

**Total credit hours: 15**

### Business Admin.-Operations Management C251200P

BUS 137 Principles of Management	3
CIS 110 Introduction to Computers	3
ISC 121 Environmental Health & Safety	3
ISC 130 Intro to Quality Control	3
ISC 210 Oper. & Prod Planning	3
OST 136 Word Processing	3

**Total credit hours: 18**

### \*Computer -Integrated Machining C50210P

BPR 111 Print Reading	2
MAC 141 Machine Applications I	4
MAC 142 Machine Applications II	4
MAC 121 Intro to CNC	2

**Total credit hours: 12**

### Cosmetology C55140P

COS 111 Cosmetology Concepts I	4
COS 112 Salon I	8
COS 113 Cosmetology Concepts II	4
COS 114 Salon II	8
COS 115 Cosmetology Concepts III	4
COS 116 Salon III	4
COS 240 Contemporary Design	2

**Total credit hours: 34**

### COS:Esthetics Technology C55230P

COS 119 Esthetics Concepts I	2
COS 120 Esthetics Salon I	6
COS 125 Esthetics Concepts II	2
COS 126 Esthetics Salon II	6

**Total credit hours: 16**

### Cyber Crime Technology Basic Certificate C55210AP

CCT 110 Intro to Cyber Crime	3
CCT 112 Ethics & High Technology	3
CIS 110 Introduction to Computers	3
CTS 120 Hardware/Software Support	3
DBA 110 Database Concepts	3
NET 125 Introduction to Networks	3

**Total credit hours: 18**

### Early Childhood Education C55220P

EDU 119 Intro to Early Childhood Ed.	4
EDU 131 Child, Family and Community	3
EDU 145 Child Development II	3
EDU 146 Child Guidance	3
EDU 153 Health, Safety and Nutrition	3

**Total credit hours: 16**

### Early Childhood Infant Toddler C55290P

EDU 119 Intro to Early Childhood Ed	4
EDU 131 Child Family and Community	3
EDU 144 Child Development I	3
EDU 153 Health, Safety, & Nutrition	3
EDU 234 Infants, Toddlers, and Twos	3

**Total credit hours: 16**

### Electrical Systems Technology C35130P

ELC 113 Residential Wiring	4
ELC 118 National Electrical Code	2
ELC 128 Introduction to PLC	3
ELC 131 Circuit Analysis 1	4
ELC 131A Circuit Analysis 1 Lab	1
ISC 112 Industrial Safety	2

**Total credit hours: 16**

\* Other CCP pathway options available. See Advisor.



**EM: Criminal Justice C55460CP**

CJC 111	Intro to Criminal Justice	3
CJC 131	Criminal Law	3
CJC 132	Court Procedure & Evidence	3
CJC 231	Constitutional Law	3
ACA 115	Success & Study Skills	1

**Total credit hours: 13****EM: Emergency Management C55460EP**

EPT 130	Mitigation & Preparedness	3
EPT 140	Emergency Management	3
EMS 110	EMT	9
ACA 115	Success & Study Skills	1

**Total credit hours: 16****EM: Fire Technology C55460FP**

FIP 120	Intro to Fire Protection	3
FIP 124	Fire Prevention & Public Ed	3
FIP 132	Building Construction	3
FIP 162	Firefighter Safety & Wellness	3
FIP 228	Local Govt Finance	3
ACA 115	Success & Study Skills	1

**Total credit hours: 16****Emergency Medical Science C45340P**

EMS 110	EMT	9
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3
ACA 115	Success & Study Skills	1

**Total credit hours: 16****Health Information Technology C45360P**

CIS 111	Basic PC Literacy	2
HIT 110	Intro to Health Care & HIM	3
HIT 112	Health Law Ethics	3
HIT 114	Health Data Systems/Standards	3
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3

**Total credit hours: 17****HIT: Medical Billing and Coding C45360BP**

HIT 124	Prof Practice Exp II	1
HIT 215	Revenue Cycle Management	2
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3
OST 247	Procedure Coding	3
OST 248	Diagnostic Coding	3
OST 249	Med Coding Certification Prep	2

**Total credit hours: 18****Healthcare Management Tech Receptionist C25200P**

BUS 253	Leadership & Management Skills	3
HIT 114	Health Data Systems/Standards	3
HMT 110	Intro to Healthcare Management	3
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3
OST 149	Medical Legal Issues	3

**Total credit hours: 18****Information Technology C25590AP**

CIS 110	Introduction to Computers	3
CTS 120	Hardware/Software Support	3
NOS 130	Windows Single User	3
WEB 115	Web Markup and Scripting	3

**Total credit hours: 12****IT: Software and Web Development C25590EP**

CSC 151	JAVA Programming	3
DBA 110	Database Concepts	3
WEB 111	Intro to Web Graphics	3
WEB 115	Web Markup and Scripting	3

**Total credit hours: 12****IT: Web Admin and Design C25590GP**

WEB 111	Intro to Web Graphics	3
WEB 115	Web Markup and Scripting	3
WEB 120	Intro to Internet Multimedia	3
WEB 214	Social Media	3

**Total credit hours: 12****Mechatronics Engineering Technology C40350P**

ATR 112	Intro to Automation	3
CIS 110	Intro to Computers	3
DFT 119	Basic Cad	2
EGR 125	Appl Software for Tech	2
EGR 150	Intro to Engineering	2
HYD 110	Hydraulics Pneumatics	3
MNT110	Intro to Maintenance Procedures	2

**Total Credits: 17****Nursing Assistant C45840P**

NAS 101	Nursing Assistant I	6
NAS 102	Nursing Assistant II	6
MED 121	Medical Terminology I	3
MED 122	Medical Terminology II	3

**Total credit hours: 18****Office Administration C25370P**

CIS 110	Introduction to Computers	3
OST 136	Word Processing	3
OST 164	Text Editing Apps	3
OST 184	Records Management	3
OST 289	Office Admin. Capstone	3

**Total credit hours: 15****Photographic Technology C30280P**

PHO 110	Fundamentals of Photography	5
PHO 115	Basic Studio Lighting	4
PHO 139	Intro to Digital Imaging	2
PHO 120	Intermediate Photography	4
ACA 115	Success & Study Skills	1

**Total credit hours: 16****Welding Technology C50420P**

WLD 110	Cutting Processes	2
WLD 115	SMAW (stick) Plate	5
WLD 121	GMAW (MIG) FCAW/Plate	4
WLD 131	GTAW (TIG) Plate	4
WLD 141	Symbols and Specifications	3

**Total credit hours: 18**

# Academic Regulations

## Grading System

MTCC grading system is based on a semester schedule. Grade point averages are determined by dividing the total number of quality points by the number of hours attempted. If a course is repeated, the latest grade will be used in determining a student's hour quality points. Grades will be issued at the conclusion of each semester based on the following system:

Numerical Grade	Letter Grade	Quality Point Equivalent
93-100	A-Excellent	4 points per credit hour
85-92	B-Above Average	3 points per credit hour
77-84	C-Average	2 points per credit hour
70-76	D-Below Average	1 point per credit hour
Below 70	F-Failure	0 grade point (punitive)
AU-Audit		No effect on grade point average
CR-Credit by Exam		No effect on grade point average
I-Incomplete		After the first day of the subsequent semester, an incomplete grade becomes an "F" (punitive)
NS-No Show (never attended class)		No effect on grade point average
PD-Pass Developmental		No effect on grade point average
RD-Repeat Developmental		No effect on grade point average
W-Withdrawal prior to 30% point		No effect on grade point average
WP-Withdrawal Passing after 30% point		No effect on grade point average
WF-Withdrawal Failing after 30% point		0 grade point (punitive)
No Withdrawals allowed after 75% point		

\*\* The above Numerical Grade does not apply to Health Science Programs. Please see individual program handbooks for program requirements.

\*\*An 80 or above is required for the HIT, Nurse Aide, Practical Nurse, ADN programs and all developmental courses.

\*\*Under unusual or extenuating circumstances, faculty may use a different grading system other than the one listed above. Should this be necessary, the instructor must approve this change with administrators in Educational Programs and list the new grading system on the course syllabi for that particular course.

## Incompletes

The grade "I," incomplete, may be assigned when a student is unable to complete a course by the end of the semester. The student must present valid reasons why the course cannot be completed and obtain the instructor's approval to receive an incomplete grade. This grade will be replaced with the grade earned when the work to be completed is satisfactorily accomplished prior to the first day of class in the following semester. If the incomplete course is a pre-requisite to a course the student is registered for in the following semester, and if the student is unable to complete the requirements to satisfy the incomplete grade, the student will be withdrawn from the subsequent course. An incomplete grade is treated as a failing grade in GPA computation after the first day of the subsequent semester when the work has not been completed. The faculty member of the course will complete a Change of Grade Form to document that the incomplete has, in fact, been satisfied.

Only under extenuating circumstances may the Vice President of Learning extend the deadline for the completion of an incomplete grade. In such a rare case, the student, faculty and Vice President will sign a memo of understanding outlining the parameters of the extension.

## Standards of Progress

All MTCC students are expected to make academic progress toward graduation. The grade point average required for graduation is 2.00, indicating that the student has a C average in all course work. The calculations listed below are the

acceptable grade point averages which students are expected to maintain for the number of semester hours they have accumulated.

### ***ASSOCIATE DEGREE PROGRAMS***

<b>Cumulative Semester Hours</b>	<b>Minimum Grade Point Average</b>
0 - 10	1.00
11 - 20	1.25
21 - 30	1.50
31 - 40	1.75
41 - 50	1.90
51 - Completion	2.00

### ***VOCATIONAL DIPLOMA PROGRAMS***

<b>Cumulative Semester Hours</b>	<b>Minimum Grade Point Average</b>
0 - 10	1.00
11 - 20	1.35
21 - 30	1.75
31 - Completion	2.00

*\*\*There are additional regulations for Nursing, HIT, BLET, EMS Paramedic and other specific curriculums. Check with the Student Services Office, the Nursing Department, or your advisor for these regulations. Also, see Graduation Requirements in this Catalog.*

### ***Academic Advisement/Probation***

The above cumulative grade point averages are the minimums which must be attained in order for a student to make reasonable progress toward graduation. A 2.00 grade point average is required for graduation. Students who fall below the specified minimum will be placed on Academic Probation for the following semester and will be required to reduce their course loads.

### ***Academic Suspension and Readmission***

Students who fail to earn a 2.00 GPA during any semester of academic probation may be suspended from their program of study. The period of suspension will not be less than one semester, nor more than one year. Students who have been suspended for academic deficiencies should submit requests for readmission to the VP for Learning and Student Services. Requests for readmission will be considered in light of the applicant's ability, evidence of growth and maturity, time elapsed since suspension and other extenuating circumstances. Additional consideration will be given to those who have completed course pre-requisites. Enrollment limits and class sequencing will also be considered in evaluating a request for readmission.

### ***Recognition of Academic Honor Students***

Students enrolled full-time (12 credit hours or more) who receive no incompletes are eligible for the following academic honor's lists:

- President's List - Grade point average of 4.00
- Dean's List - Grade point average of 3.75 - 3.99
- Honor List - Grade point average of 3.50 - 3.74

Academic honor lists are posted on-campus and provided to newspapers each semester.

### ***Onboarding and Faculty Advisors***

Each student enrolled at MTCC will be assigned onboarding and faculty advisors. The onboarding advisor will provide each student personal assistance in orientation to MTCC's policies and procedures, confirm the student's program major, and help the student register for first semester classes. The onboarding advisor will serve as a success coach for the student throughout the duration of enrollment at MTCC.

The student's faculty advisor will work with the student after the initial enrollment in classes at MTCC. The faculty advisor will provide assistance in developing an educational plan, evaluating the student's progress, and registration for

courses for the remaining semesters at MTCC. The student's faculty advisor may be consulted regarding various problems, but must, in all cases, be consulted by the student in the following instances:

1. When planning each semester's schedule (after the first semester).
2. When changing courses within the current program.
3. When changing programs of study.
4. When preparing to enter a final semester of studies to determine graduation eligibility.

If a student is unsure who his or her current advisor is, the student should contact Student Services for the advisor name, location, phone number and email address. Advisors maintain office hours as posted on their office doors.

### ***Registration***

MTCC operates on the semester system (Fall, Spring, and Summer). All students are expected to register during the time set aside for that purpose. MTCC offers Pre-Registration dates to give students more time and flexibility to register and meet with their advisors as well as offering a one-time Late Registration Day. These dates are listed in the MTCC Catalog, the Schedule of Classes, and the MTCC website.

Students may not register for a semester until they have paid any deferred or past due charges owed to the College. These fees are paid through the Business Office. Students are responsible for obtaining registration clearance each semester before they are permitted to register for classes. All current students who register late will be charged an additional fee of \$5.00.

### ***Schedule Changes and Withdrawal***

Students may change their academic schedules during the prescribed period without scholastic penalty. Courses dropped after the 10% point in the semester are not subject to a refund. Courses dropped after the 30% point in the semester will be marked "WP" (Withdrawal Passing) or "WF" (Withdrawal Failing). A "WF" carries the same weight as an "F" (Failure).

The steps below must be followed before schedule changes are official:

1. The student secures a Add-Drop-Withdrawal Form from the Student Services Office.
2. Individual schedule changes must be approved by the appropriate instructor.
3. Notification of schedule changes must be acknowledged and recorded by the Student Services Office.
4. Students who do not withdraw from school officially and have to be administratively withdrawn from school because of absences will be dropped from classes with grades of "WP" or "WF"

### ***Procedures for Student Withdrawal***

To officially withdraw from the College or from a course, the student must follow these procedures:

1. The student reports to the Student Services Office to obtain a withdrawal form.
2. The student is responsible for obtaining each instructor's signature, last date of attendance and withdrawal grade on the withdrawal form, and is responsible for returning this form back to the Student Services Office. If the circumstances surrounding the withdrawal process do not allow the student to do the above, the Student Services Office will perform the withdrawal procedure for the student upon request.
3. A student may withdraw prior to the 30% point of the semester without scholastic penalty. This procedure, if followed, will entitle the student to have his permanent record show the notation "W" withdrawn. This notation indicates good standing and the privilege of readmission but may affect financial aid.
4. Any student who withdraws, or is withdrawn due to violation of the College's attendance policy, after the 30% point of the semester will receive a grade of "WP" or "WF"
5. Any student who withdraws or is withdrawn after the 75% point of the semester will receive the earned grade, including course work for the remaining portion of the semester.
6. Any student who fails to officially withdraw from the College may receive a grade of "WF" STUDENTS ARE ENCOURAGED TO INITIATE AND FOLLOW THROUGH WITH OFFICIAL WITHDRAWAL PROCEDURES.

### ***Course Substitutions***

Students may be allowed to substitute one course for another to meet graduation requirements. The substituted course



must contribute to the goals of the degree program equally as well as the original course. Students must obtain approval from the instructor, advisor, appropriate Dean and the VP for Learning and Student Services to gain approval. A course substitution form may be obtained in the Student Services Office.

### ***Repeating Courses***

A course may be repeated for credit for the purposes of obtaining certification hours, gaining additional knowledge, improving a grade or for the purposes of auditing a class. A student may receive credit hours toward graduation only once for a course. In the case of a course which has been repeated, only the quality points and hours earned in the most recent enrollment will be calculated in the GPA. However, all grades will be shown on the transcript during the semester in which the course was taken.

Students may receive financial aid one additional time for a repeated course that was previously passed if the student is attempting to better that grade. Students may also receive financial aid for a repeated course in which they previously received a grade of "F" regardless of the number of prior attempts, as long as they are maintaining satisfactory academic progress per financial aid guidelines.

Veteran's benefits may not be received by students repeating a course unless it is to achieve the minimum grade required for graduation.

### ***Auditing Courses***

Students who wish to audit courses must register and pay the same fees as students taking courses for credit. Unless the instructor makes an exception, auditing students are subject to the attendance policy (as stated in the *College Catalog and Student Handbook*). Students auditing courses which involve laboratory work may work in labs only during the course's scheduled laboratory hours and under the direct supervision of the instructor. Otherwise, labs are closed to auditing students.

No financial aid is received for audited classes. Audited courses are not eligible for Veteran's educational benefit payments.

\*Note: If auditing a course that is a pre-requisite, a student cannot receive credit and progress to the next course. Contact your advisor for additional questions.

### ***Change of Program***

All MTCC students wishing to change their program of study must pick up a Student Data Change Form located in the Student Services Office. A change of major will be applied at the beginning of each semester. Once your program change has been processed, a new advisor will be assigned for the purpose of re-evaluating your new program and transferring applicable credits.

Students who request a major change from a certificate or diploma program to an associate degree program will have to update placement tests through the Student Enrichment Center.

### ***Credit or Contact Hours***

Credit for course work is recorded in semester hours. One semester hour credit is given for one hour of class work, two hours of laboratory or three hours shop work/clinical per week during a 16 week term. Work-based Learning credit is one semester hour of credit for 160 hours of work per semester.

### ***Maximum Course Load***

Students are encouraged not to enroll in more courses than they can successfully complete. Students enrolling for 19 credit hours up to 22 maximum credit hours must have special permission from the faculty advisor and VP of Learning and Student Services and have a GPA of 3.00 or higher.

### ***Class Attendance***

Students are expected to attend and be on time for all classes, labs and clinical periods and shop sessions.

A student who never attends class will be assigned a grade of "NS" (no show).

A student who is absent for five consecutive class sessions or two consecutive weeks of class or whose total absences exceed 20% of the total scheduled hours for a class, laboratory period or shop session will be automatically withdrawn from class by their instructor and assigned a grade of "W" (Withdrawn) if the withdrawal date is prior to the 30% point of the course (30% of the total scheduled hours of the class). If the withdrawal date is after the 30% point, but before the 75% point, the student will be assigned a grade of either "WP" (Withdrawn Pass) or "WF" (Withdrawn Fail), depending upon whether the student was passing or failing the class at the time of withdrawal. After the 75% point, the student will still

be administratively withdrawn but will receive the grade earned, including course work for the remaining portion of the semester. (For Individualized Instruction, a student must complete 100% of required hours.) Health Science programs may have more stringent attendance requirements.

If the student does not follow through with official withdrawal procedures, the instructor will complete a drop/add form and give it to the Registrar in Student Services when a student has been withdrawn for attendance reasons. The instructor will have the option to assign a non-punitive grade, regardless of the student's academic status in that course.

Exceptions to the above policies will be made only on rare occasions when the nature of a student's absences warrant such exception. Appeals should be made in writing to the VP for Learning and Student Services. Permission to be readmitted to class (and thereby remove the withdrawal grade) will be granted by joint approval of the instructor responsible for the course and the VP for Learning and Student Services.

### ***Procedure for Attendance in All (including online) Classes***

Per Department of Education regulations in 34 C.F.R. 668.22 (1) (7), the following activities are considered academic attendance or an academically-related activity:

- Physically attending a class where there is an opportunity for direct interaction between the instructor and students
- Submitting an academic assignment
- Taking an exam, an interactive tutorial, or computer-assisted instruction
- Attending a study group that is assigned by the institution
- Participating in an online discussion about academic matters
- Initiating contact with a faculty member to ask a question about the academic subject studied in the course

The following activities would not be considered an academically-related activity:

- Logging into an online class without active participation
- Participating in academic counseling or advising

With the understanding that federal standards regarding attendance in distance education courses are more rigorous than those of the state, the procedure for documenting attendance in online courses should include:

- An activity scheduled for each week that indicates some form of active attendance; such as:
  1. Interactive tutorial in which the student must participate to receive an attendance mark
  2. Video with required completion of at least one question after viewing
  3. Discussion board/interaction with other students in class
  4. Practice exam
  5. Test review
  6. Quiz (less than 5 questions would be acceptable)
  7. Required reading with completion of at least one question after reading
  8. Journal entry based on material covered or read
- An activity would not include simply downloading material for reading, watching a video without interaction or questions, logging in with no indication of work
- There should be at least one activity each week that documents attendance; this documentation should be easily accessible for auditing purposes
- If a student fails to participate in an activity for two consecutive weeks, the student should be withdrawn from the class with a last date of attendance equal to the last documented activity

### ***Final Exams***

Final exams in all subjects will be held at the end of each semester. These evaluations (tests or other) combined with the student's record in class will constitute the final grade.

### ***Grade Reports***

Final grade reports will be posted in WebAdvisor. If the student has any outstanding debt to the college, the grade report will be held until the debt is resolved.

Grades will be changed due to a computational error within six weeks of the due date for final grade submission. Under no circumstances will a student be allowed to do makeup work to improve a grade once final grades have been submitted.

All grade changes must be approved by the Registrar.

### ***Change of Name or Address***

Students should immediately report any change of name or address on the appropriate form to the Student Services Office.

### ***Student Classification***

Full-Time Student:\*      A student enrolled for 12 or more credit hours.

Part-Time Student:\*      A student enrolled for less than 12 credit hours.

Freshman:      A student with fewer than 32 semester hours of credit.

Sophomore:      A student with 32 or more semester hours of credit.

\*Since the summer semester is an abbreviated term, 9 or more credit hours is considered full-time during the summer; less than 9 hours is considered part-time.

For financial aid purposes, a student must be enrolled for 12 semester hours of credit during any semester for which he/she wishes to be considered full-time, including the summer semester.

### ***Graduation Requirements***

It is the responsibility of each student to know and to meet the graduation requirements of the College in her/his particular program of study and to maintain the minimum required grade average. Counselors and faculty advisors are available to work with individual students, but the final responsibility for meeting graduation requirements lies with the student. The following list constitutes the minimum requirements for graduation:

1. Satisfy proficiency standards in English, math, and reading. Complete all course requirements as outlined by curriculums, achieve an overall grade point average of 2.00 or above with all passing grades.
2. Students who fail individual subjects or have incomplete grades must make up such deficiencies before being allowed to graduate.
3. Students graduating from a diploma or associate degree program are required to take either the ETS Proficiency Profile and/or the ACT Career Readiness Certification examinations prior to graduation. The results of this testing do not have any impact upon graduation and are utilized for the purposes of assessing the extent to which graduates have attained college-level general education competencies. The results of the assessment are utilized to determine the need for improvement strategies in curriculum course-work directly related to core general education competencies. The ACT Career Readiness Certification is an industry-recognized credential that is beneficial to students with job placement.
4. Application for Degree Completion Forms must be submitted to the Student Services Office at least one semester prior to the completion of course requirements. One semester prior to the semester that the student expects to complete diploma or degree requirements, the student is expected to have a preliminary record check by an academic advisor. It is the student's responsibility to arrange for a final record check with the Director of Enrollment Management.
5. Students must fulfill all financial obligations to the College.

### ***Graduation vs. Conferring of Degrees***

McDowell Tech confers degrees three times a year: December (Fall), May (Spring), and August (Summer). Degrees can only be conferred once a student applies to graduate.

Students should apply to graduate one semester "prior" to graduation. Application for Degree Completion Forms can be picked up in Student Services, or found on the web page under "Academics > Graduation Requirements."

The graduation ceremony is in May. It is optional for all students. If you are taking summer classes and want to participate, as long as you are within 10 hours or one semester of completing degree, you may participate.

There are additional costs for the cap, gown, tassel, and honor chords. Information is listed in the graduation application.

### ***Graduation With Honors and High Honors***

A graduate who completes two-thirds of his/her curriculum program at MTCC with an accumulated grade point average of 3.50 to 3.79 on a 4.0 scale will be graduated with “honors.” Graduates with an accumulated grade point average of 3.80 to 4.0 will graduate with “high honors.” These distinctions will be noted on the diploma and on the student’s permanent record.

### ***Completion of Two A.A.S. Degrees***

Students who fulfill degree requirements for two curriculum programs within a prescribed term of study shall be awarded only one degree at commencement. However, completion of both degree requirements will be noted on the student’s permanent record and credentials.

Any MTCC graduate who desires a second degree must fulfill all degree requirements for the second degree plus a minimum of 20 semester hour credits earned in residency beyond the first degree. Students with an Associate Degree from another accredited institution may receive a second Associate Degree from MTCC by fulfilling the conditions outlined above.

# Distance Learning

## ***Distance Learning***

**Distance Learning** is teaching and learning across geographical distances through the use of a Learning Management System (LMS), a software program for online course delivery. MTCC utilizes Open LMS as our LMS, and students use computers and the Internet to access course materials, lectures, notes, assignments, and tests.

Distance learning courses offer a high degree of flexibility and may eliminate barriers to educational goals. Students taking courses by distance learning methods must be self-motivated, self-disciplined learners, and should have average or above average computer skills. Since students work more independently than in traditional courses, distance learning may not be the best method of instruction for all students.

All facilities and resources available to traditional MTCC students, such as student services, library resources, and support services, are also available to the distance learner, and the same tuition and fees apply, as does curriculum credit.

MTCC charges no student fees solely associated with Distance Learning courses.

## ***Methods of Instruction in Distance Education Classes***

- **Online** class instruction is offered off campus and delivered via the Internet. Students receive their assignments and information from an instructor, participate in online discussion forums, submit work, and take tests through Open LMS. However, a student may be required to come to campus or select a college approved proctor to complete an exam. Instructors are available by email, telephone, and on campus during office hours. These sections are designated by 50-53 on the academic schedule or roster.

*An **Orientation** for online classes is provided and it is highly recommended that new online students attend this meeting; the orientation will provide useful information, resources, and tutorials that can help a student succeed in distance education courses. By completing the orientation prior to taking an online course, a student will be better prepared and ready to concentrate on the course content, rather than logistics and software issues.*

*Location: main campus.*

- **Blended and Hybrid** courses are offered on campus, but they have an internet component. Students will meet with their professor in a classroom at predetermined days/times. The online portion of the course is supplemented with class notes, assignments, tests, and discussion forums, which are available online through Open LMS. These sections are designated by 20-29 in the academic schedule or roster.
- **North Carolina Information Highway (NCIH)**, also known as the Information Highway courses, are teleconferences that are delivered in a special classroom on campus at a specific time and day. This method enables an instructor at one location to teach to one or more other locations. It also allows MTCC to provide courses that might otherwise not be available locally. It is full, two-way, audio/video communication; classes are both sent and received using microphones, video cameras, television monitors, and telephones in the Interactive Television (ITV) classroom. Open LMS is utilized as a supplementary component for testing and assignments. Sections that are designated by 40-42 are NCIH classes in the academic schedule or roster.
- **Web-Assisted** classes meet face to face for all class meetings, but students are required to have internet access as a supplemental part of the course. My Math Lab, My Art Lab, Web Tutor, and My Education Lab are a few of the online web-assisted programs that we utilize. Sections 30-39 on the academic roster are web-assisted classes in the academic schedule or roster.
- **Telecourse** is an innovative instructional method involving the use of television programs, textbooks, CD's, and other materials to provide distant access to a limited number of curriculum courses. These courses are designated as sections 43-45 on the academic roster.

## ***Non-Traditional Classes***

### ***Individualized Instruction (Independent Study)***

Students may under certain circumstances register for courses by Individualized Instruction. Students who wish to register for a course through Individualized Instruction should contact the Student Services Office to procure the appropriate form to be completed. The student is required to have a 2.50 grade point average or recommendation of faculty advisor, present reasons why the course cannot be taken in a regular class, obtain written approval from the instructor of the course and the VP for Learning and Student Services, and submit a completed Request for Individualized Instruction Form to the Student Services Office.

No more than one course per semester may be taken as Individualized Instruction, for a maximum of 12 semester hours that can be counted toward graduation.

## ***Work-Based Learning(WBL)***

Work-Based Learning is designed to give students an opportunity to receive non-required core credit, and in some limited cases, required credit for on-the-job work experience. Students participating in work-based will work under the direction of MTCC's assigned Work-Based Learning Coordinator for the student's specific program of study, their job supervisor, and their Curriculum Advisor. The work experience used for WBL must be significantly related to the student's program of study.

### ***Eligibility***

Any student who is enrolled in a curriculum program which offers WBL for academic credit may be eligible if they meet the following requirements:

1. Be approved by his/her advisor.
2. Be approved by the WBL Coordinator.
3. Have an employer or gain an employer that agrees to participated in the WBL program and follow the guidelines required in the WBL Student Handbook.
4. The employment is significantly related to the student's program of study.

### ***Academic Credit***

Students may earn a maximum of two WBL credits in one semester (four WBL credits if enrolled in an Apprenticeship NC program in one semester). The work-based learning student may receive a maximum of eight total hours of academic credit for an approved Associate of Applied Science (sixteen total hours of academic credit for an approved Associated of Applied Science when enrolled in an Apprentice NC program), up to four total hours of academic credit for an approved Diploma program (eight total hours of academic credit for an approved Diploma program when enrolled in an Apprentice NC program), up to two total hours of academic credit for an approved Certificate program, and one credit hour of academic credit in the Associate of Arts program. One college credit hour of WBL requires 160 hours of work.

### ***WBL Options***

Eligible students in the College Transfer program must use WBL credit for non-required core credit. Students in Technical Degree programs must use WBL credit for non-required core credit, except in programs where WBL courses are listed as a requirement. Approval for substituting WBL for required curriculum courses must be approved by the Dean of the program, the VP for Learning and Student Services, the Curriculum Advisor, and the WBL Coordinator.

### ***Application Procedure***

Students interested in participating in the WBL program must contact the WBL Coordinator for their program of study and their curriculum advisor. Students are selected for WBL based on an evaluation of their interview and other pertinent criteria. After a student has been approved for WBL, the curriculum advisor will assist him/her in locating an appropriate assignment. Students already working must have the approval of the College and employer.

### ***Registration***

Students must have the approval of the WBL Coordinator and curriculum advisor before registering for a WBL work experience. Those students who are approved must follow normal registration procedures. Students are invited to inquire for more detailed information regarding WBL from their program advisor.

## ***Apprenticeship Training***

If a system of "learning by doing" under the guidance of "master craftsmen" has endured for over 4,000 years, the system undoubtedly contains basic qualitative factors for our contemporary society. These factors should be identified clearly and implemented properly where such training is needed.

North Carolina is requiring increasingly greater numbers of highly trained men and women to keep pace with our rapidly changing economy. New demands on the abilities and experience of workers, who need wider training because of changing methods, materials and technology, call for a new look into educational methods. Apprenticeship is an effective means for a young person to develop formal skills. As such, it makes a major contribution to our state's economic growth.

McDowell Technical Community College can help train an employed apprentice by making available necessary courses, instructors and classrooms for the educational piece to ApprenticeNC.

The main objective for the Apprenticeship Program is to combine on-the-job training with a program of formal related instruction through MTCC. The major objective of the related instruction is to teach an apprentice that part of the technical related information pertaining to his/her trade which can best be taught in the classroom. Other objectives



include: development of an ability to apply technical related information to his or her trade, evolvement of proper attitudes and human relations, and adjustment to social problems encountered in the world of work. The North Carolina Community College ApprenticeNC program has mandated that related training will be required of every ApprenticeNC participant.

MTCC has courses in the curriculum program that offer the apprentice an opportunity to acquire an Associate Degree, Diploma, Certificate, or Industry Recognized Credential at the same time they are completing the Apprenticeship Program.

Apprenticeships include pre-apprentice, adult apprentice, and youth apprentice programs. Students enrolled in an apprenticeship program earn pay from an employer. Many times the employer pays while the employee is attending college classes. In addition, youth apprentices attend college tuition waived. Adults participating in an apprenticeship program may be eligible for state scholarships. For more detailed information, students should contact their program advisor.

### ***High School Completion***

Adults may complete high school education through the Adult High School Diploma Program, or the High School Equivalency Program. These programs are available to all non-high school graduates who are at least eighteen years of age or those sixteen years of age who have been out of public school six months or longer. Students between the ages of sixteen and eighteen must have a minor permission form signed by a parent or legal guardian, as well as the signature of the principal at the last high school attended. Please note that students 16-17 years of age must contact the College and Career Readiness Department to request drop-release paperwork to be eligible to take adult high school courses or high school equivalency assessments in North Carolina.

The Adult High School Program offers instruction to assist learners in preparing to successfully complete the credits required for a High School Diploma. Accumulation of a pre-determined number of credits as approved by McDowell County Schools (MCS) is required. Required courses are based on a transcript evaluation from the high school last attended and may include: English, mathematics, science, social studies, health, and electives. Students must meet enrollment requirements and provide an official sealed transcript from the high school last attended.

The High School Equivalency (HSE) Diploma Program offers instruction to assist learners in preparing to successfully pass a designated high school equivalency assessment. The three nationally-recognized assessments used to obtain a state-issued High School Equivalency credential in North Carolina are GED®, HiSET® and TASC®. All three High School Equivalency assessments are recognized by US Department of Education USDOE GEN-14-16 ([link is external](#)) and cover the same content areas. Passing any one of the assessments will lead to the same High School Equivalency Diploma issued by the North Carolina State Board of Community Colleges. Currently, MTCC offers two of the testing options, the GED® and the HiSET® examination.

The GED® Testing fee is \$80.00 and is a computer-based test of four subjects (Language Arts, Science, Social Studies, and Mathematics). Students may retake the test up to two times for free.

The HiSET® Testing fee is \$50.00 and is a computer-based test of five subjects (Reading, Writing, Science, Social Studies, and Mathematics). Students may retake the test up to two times for free.



# Student Expenses

McDowell Technical Community College receives financial support from local, state and federal sources, allowing educational opportunities at a minimum cost. **Tuition fees are set by the State Board of Community Colleges and are subject to change without notice.** Cost of textbooks and supplies are additional expenses which vary according to the program of study. The payment of tuition and all required fees must be made at the time of registration unless deferred payment arrangements have been made with the Business Office.

*\*Students are not officially registered until tuition payment and fees have been received in the Business Office or deferred by Financial Aid or a signed Promissory Note.*

*\*\*The following information applies to students enrolled in curriculum programs (technical, vocational, college transfer and general education). For information on Continuing Education fees, see the appropriate section of this catalog.*

## ***TUITION (In-State)***

**\$76.00 per credit hour, up to a maximum tuition charge  
of \$1,216.00 per semester.  
[16 or more credit hours=\$1,216.00]**

## ***TUITION (Out-of-State)***

Any student whose legal residence is outside the State of North Carolina, or, in the case of students who are boarding or living with relatives in the community, whose parents or guardians are living outside the State, shall pay tuition fees as follows: \$268.00 per semester credit hour, up to 16 credit hours; maximum tuition charge of \$4,288.00 per semester.

### ***Past Due Accounts***

Students may not register for a semester, receive transcripts or participate in graduation until deferred or past due charges are paid in the Business Office.

### ***Residency Status For Tuition Purposes***

Under North Carolina law, persons must qualify as state residents for a tuition rate lower than that for non-residents.

### ***Residency Determination Service***

All individuals applying to MTCC will be required to complete the online residency determination prior to applying to the college. It is recommended that applicants complete the residency determination well in advance of the semester they wish to start. Upon completion of the residency determination, students will be issued a Residency Certification Number (RCN) which will be utilized at all colleges in NC.

MTCC will continue to work with students who have business sponsorships, are using military benefits or other exceptions allowed by the state. All other residency determinations will be made by CFI and not MTCC.

The Residency Determination Service will provide separate processes to reach a residency classification. Most students will only be required to complete the Initial Consideration process. The Reconsideration and Appeal processes are for those students who experience a change in circumstances (Reconsideration) or who have not had a change in status and believe their residency classification is incorrect (appeal).

All students, parents, faculty, staff, and constituents of the North Carolina Community College System should refer to the Residency website at [www.ncresidency.org](http://www.ncresidency.org) for more current details regarding the North Carolina Residency Determination Service, processes and required residency guidelines.

### ***Tuition Exemptions***

College tuition exemptions are as follows:

- Current high school students taking courses at community colleges.
- Some students enrolled in the BLET training program .
- Any person who is the survivor of a law enforcement officer, firefighter, volunteer firefighter, or rescue squad worker killed as a direct result of traumatic injury sustained in the line of duty may be eligible for a tuition waiver.
- Any spouse or children (ages 17 to 22) of law enforcement officers, firefighters, volunteer firefighters, or rescue squad workers who are permanently and totally disabled as a result of a traumatic injury sustained in the line of duty may be eligible for waiver of tuition.

### ***Late Registration Fee***

Currently enrolled students who do not pay tuition and fees on or before the day of registration will be assessed a \$5.00 late charge. New students or former students (students who were not enrolled during the past academic year) who register during the prescribed registration period will not be assessed a late registration fee.

### ***Activity Fee***

All curriculum students are required to pay the Student Government Activity Fee as follows:

\$20.00 per semester

These fees are not refundable except when approved by the Vice President for Finance and Administration according to Business Office policy.

### ***Student Insurance Fee***

In order that every student may be covered by insurance in case of an accident, institutional policy requires that each student enroll in the accident insurance program at registration. The established fee is \$1.30 per semester. This fee is not refundable.

### ***Liability Insurance***

Students enrolled in Practical Nursing Education, Associate Degree Nursing, Nurse Aide, Teacher Associate, Cosmetology, Nail Technology, Health Information Technology, Phlebotomy and Early Childhood Associate are required to purchase professional liability insurance coverage. The cost of liability insurance is \$14.50 per year.

### ***Technology Fee***

In order to offset the cost of copies, toner, state-of-the-art computer labs, and other technology made available to students, a fee of \$1.50 per credit hour, up to a maximum of \$24.00 per semester, is charged to each student at the time of registration. This fee is not refundable.

### ***Identification Badge***

All curriculum students are required to purchase a picture identification badge to be on his/her person at all times while on the campus grounds for a fee of \$5.00 for the academic year.

### ***Parking Fees***

All curriculum students are required to purchase a parking pass to be placed in his/her vehicle at all times while on the campus grounds for a fee of \$5.00 per semester. All occupational extension students taking a semester-long course are required to purchase a pass to be placed in his/her vehicle at all times while on the campus grounds for a fee of \$5.00 per semester. Other short-term students taking classes will be identified with parking passes given at the time of registration.

### ***Fees For Special Purposes-Student Success Fee***

All curriculum students are required to pay a Student Success Fee of \$5.00 per semester. This fee pays for the printed diploma, diploma cover, and large mailing envelope. Additionally, students are required to purchase a cap/gown/tassell if they participate in the graduation ceremony. The Student Success Fee funds may also be utilized to pay for services or equipment that will benefit all students.

### ***Educational Testing Fee***

Students enrolled in the Practical Nursing Education and Associate Degree Nursing Programs are charged an educational testing fee each semester. There are testing fees for PNE and for ADN students which will be provided at student orientation.

### ***Transcript Copy Fee***

Students should go to Student Services to request a transcript. A fee of \$3.00 is charged for copies of official transcripts.

### ***Additional Expenses***

Some curriculums require students to purchase additional supplies, equipment and/or uniforms. Students should contact the instructor/advisor in the curriculum they plan to enter.

### ***Book Costs***

Students are required to purchase the necessary textbooks for courses. Copying of textbooks is not allowed and is a violation of copyright laws in most cases. The average cost ranges from approximately \$500 to \$800 per semester, depending on the student's chosen curriculum. Workbooks and certain text materials which are expendable items may be required by some instructors.

### ***Continuing Education Fire, Rescue and EMS College Fee***

Students attending the McDowell Fire, Rescue and EMS College will be charged a fee of \$15.00.

### ***Returned Check Fee***

A \$35.<sup>00</sup> service charge is assessed for each returned check.

### ***Refund Policy***

**Tuition refunds are not automatic; it is the student's responsibility to file a request.** Tuition refunds for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. A 100% tuition refund can be made to a student who withdraws by registration day. A 75% tuition refund can be made to a student who withdraws before the 10% point in the semester. An official withdrawal must be made by completing the "Add/Drop/Withdrawal" form. An official request for a refund must be made by completing the "Request for Refund" form. Both of these forms should be submitted together to the Student Services Office for processing. Tuition refunds will not be considered after the 10% point in the semester. There is no refund made on activity fees or insurance unless the class is cancelled. The "Request for Tuition Refund" and "Add/Drop Withdrawal" forms may be obtained in the Student Services Office.

Students will receive a copy of the textbook refund policy when textbooks are published in the College Bookstore. Books must be returned within ten days of registration for consideration of refund. All refunds are subject to the terms and conditions stated on the textbook refund policy.

### ***Proctored Test Fee***

Non-MTCC Course Proctoring: McDowell Technical Community College (MTCC) offers proctoring services through the UNC Online Proctoring Network and for other colleges and universities as a community service. Proctoring is available in the Academic Resource Center (ARC) anytime during the hours of operation, when classes are in session. All proctored exams must be completed at least 30 minutes before closing time. There is a charge of \$25.00 per test for proctoring services. Proctoring fees may be paid in person in the Business Office. Fees must be paid prior to the testing appointment. Students must bring this receipt of payment to their scheduled proctoring appointment.

# *Student Financial Aid*

Students who have satisfactory academic records and are in need of aid may qualify for financial assistance. Although the primary responsibility for financing an education remains with students and families, McDowell Technical Community College participates in several programs designed to supplement individual and family contributions. Financial aid may consist of grants, scholarships, campus employment, or any combination of these as determined by the policies of the Financial Aid Office.

## *Eligibility for Financial Aid*

Eligibility requirements for receiving financial aid may change from year to year. Specific requirements are established by the U.S. Department of Education for federally funded aid programs. The North Carolina State Education Assistance Authority and the North Carolina Community College System determine eligibility for state funded programs. Any local and/or private scholarship sources determine the eligibility for awarding funds from their respective programs.

Students must be in a program leading to a degree, diploma, or eligible certificate (at least 16 semester hours and/or 38 contact hours in length) to be eligible for Federal financial aid. Therefore, students enrolled as Special Credit/Undecided are not eligible to receive Federal financial aid. In addition, any student in default of a student loan or owing a repayment of Pell Grant funds will not be awarded financial aid. Students must have a high school diploma or GED certificate in order to receive federal and/or state financial aid. An official copy of that transcript must be on file in the MTCC Admissions Office.

All students receiving financial aid must maintain satisfactory academic progress. At MTCC, students must maintain a grade point average of 2.0 and complete 67% of all credit hours attempted. Students that receive financial aid and subsequently withdraw from classes before the end of the semester may be required to repay a portion of Pell Grant and SEOG funds.

Students falling below the minimum standard for academic progress and/or in ineligible status due to overpayment of Pell Grant funds or student loan default should contact the MTCC Financial Aid Office to determine how their eligibility may be regained. (See upcoming section regarding satisfactory academic progress for further explanation.)

## *Important Information for Pell Grant Recipients Regarding Lifetime Eligibility*

In December 2011, President Obama signed into law the Consolidated Appropriations Act of 2012 (Public Law 112-74). This law significantly impacts Federal Student Aid Programs.

One of the most significant changes is Federal Pell Grant Duration of Eligibility. The law reduces the duration of a student's eligibility to receive a Federal Pell Grant to 12 full-time semesters (or it's equivalent). This provision applies to all Pell Grant eligible students effective the 2012/2013 academic year. The calculation of the duration of the student's eligibility will include all years, no matter how far in the past, that the student has received Federal Pell Grant funding. Therefore, every semester that a student has received Pell Grant funding will count toward the semester limit. Students that have attended at less than full-time status in the past, or at present, will be assessed accordingly.

The MTCC Financial Aid Office will attempt to notify students of their remaining eligibility as they apply or reapply for financial aid.

## *Application For Financial Aid*

Students applying for financial aid at MTCC should complete a Free Application for Federal Student Aid (FAFSA). The FAFSA is completed and submitted via an online process at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). There is no technical deadline to apply for financial aid at MTCC, but students should apply at least eight weeks prior to the beginning of their first semester at MTCC. Funds are limited in some financial aid categories, i.e. Federal Work Study and Supplemental Educational Opportunity Grant (SEOG). Therefore, early applicants are most likely to receive assistance if eligible and funds are available. Students may also be required to submit additional internal and external scholarship applications if interested in applying for aid other than or in addition to Federal and State funds. Scholarship applications are available in the MTCC Financial Aid Office and at local high school guidance offices.

Student financial aid information is kept confidential within the MTCC Financial Aid Office. Student financial aid awards are disbursed once a semester and can be adjusted according to changes in eligibility and enrollment.

**In order to guarantee timely usage of financial aid funds at registration, students should apply via the FAFSA prior to the dates listed below:**

Fall Semester	July 1
Spring Semester	November 1
Summer Semester	April 1

Applications received after the dates listed will be processed as quickly as possible, but there will be no guarantee that the student will have a definite financial aid decision prior to the beginning of the semester.

## ***Awarding of Financial Aid***

Most awards on the student's award offer letter are based on full-time enrollment. The award will be reduced proportionately if the student attends less than full-time. The requirement for full-time eligibility for Federal and/or State financial aid is 12 or more credit hours; 3/4 time is 9, 10, or 11 credit hours; 1/2 time is 6, 7, or 8 credit hours. In some cases, funds may be disbursed to students attending less than 1/2 time (5 credit hours or less). Students must always be enrolled in at least six credit hours to be eligible for the NC Community College Grant and NC Education Lottery Scholarship.

Because of the number of credit and/or contact hours, the following certificates are not eligible for financial aid:

- Emergency Management- CJ Certificate
- Information Systems Certificate
- Information Systems Advanced Certificate
- Software and Web Development Certificate
- Software and Web Development Advanced Certificate
- Web Administration and Design Certificate
- Web Administration and Design Advanced Certificate

## ***Nondiscrimination in Aid Awards***

As with all programs of the College, financial aid awards are made equitably without regard to age, race, color, sex, handicap, disability, religion, political affiliation, or national/ethnic origin. For further information, see the College's policies on discrimination in the General Information Section of this catalog.

## ***Year-Round Pell Grants and Crossover Periods***

Beginning with the 2017-2018 academic year, students may be eligible to receive 150% of their yearly scheduled Pell Grant award for the year. To be eligible for the additional Pell Grant funds, the student must meet the following criteria:

- Must be eligible to receive Pell Grant Funds based on a valid and completed financial aid application.
- Must be enrolled at least half-time (six or more credit hours) in the additional semester of eligibility.
- Must be enrolled in an eligible degree, diploma or certificate and taking classes within that program.
- Must be meeting satisfactory academic progress.

The additional Pell Grant funds received cannot exceed 50% of the student's yearly scheduled Pell Grant award. Additional funds will be determined on a student-by-student basis and specific to the award year. A crossover payment period is one that includes both June 30 and July overlapping two award years. If a student enrolls in a crossover payment period, MTCC will consider the crossover payment period to occur entirely in one award year. The crossover payment will be assigned to a specific award year and will be determined on a student-by-student basis.

MTCC must have a valid and completed financial aid application for the academic year in which the crossover period occurs. The school will determine which year to use based on the best interest of the student that maximizes the student's eligibility over the two award years.

## ***Satisfactory Academic Progress Standards***

Federal regulations require that institutions of higher learning establish minimum standards of Satisfactory Academic Progress (SAP) that students must meet in order to receive federal/state financial aid. This progress is measured qualitatively and quantitatively. At McDowell Technical Community College, the records of students are evaluated at the end of each semester, including Summer. In order to accurately measure a student's progress, the total academic record must be considered. This includes classes transferred from other institutions, developmental/remedial and curriculum classes. All classes transferred in from other colleges must be in the student's program of study at MTCC. These classes are counted as attempted and completed in the SAP calculation. Incomplete grades that are not finalized with a passing grade will be considered an "F" grade and calculated into the GPA accordingly. Students that withdraw from a class with a "Withdrawal Passing" grade will not have their GPA affected by that grade but it will lower the student's completion (quantitative) rate. However, students withdrawn with a grade of "WF" will have that grade calculate into their GPA as an "F" grade and the completion rate will also lower. All grades are used for calculation of overall GPA for SAP purposes even if the class is retaken and a better grade is received. In this circumstance, both classes will be part of the calculation.

To be eligible for financial aid, students must meet the following minimum guidelines:

- Qualitative: Maintain a minimum grade point average (GPA) of 2.0
- Quantitative: Complete a minimum of 67% of cumulative credit hours attempted. Successful completion is defined as receiving a grade of A, B, C, or PD.
- Time Frame: Must complete program of study in a timeframe not to exceed 150% of the length of the program for full-time students. Transfer credits used toward the student's program of study will be considered for maximum time frame.

If a student fails to maintain satisfactory academic progress standards by either quantitative and/or qualitative measures, he/she will lose eligibility for Federal and/or State financial aid. If the student feels that he/she has a legitimate mitigating circumstance which prevented successful completion of course work, he/she may complete a Statement of Financial Aid Warning requesting consideration for financial aid. This statement must include the reasons for being unsuccessful in prior semesters and a personal plan as to how they will be effective in completing all classes with passing grades. This statement is presented to the Director of Financial Aid or the Financial Aid Officer for consideration. If the warning status is granted, the student will receive aid for the upcoming semester and must agree to complete all classes with a grade of 'C' or better. Failure to do so will result in suspension of Federal and/or State financial aid. If the student is unable to meet the minimum overall academic standards despite successful completion of all classes in the semester of warning, he/she may complete the Financial Aid Satisfactory Academic Progress Appeal Request to continue financial aid eligibility. The student will be counseled of the probability of this situation prior to signing the Warning request. Additionally, if a student does not meet the requirements set forth in the Statement of Financial Aid Warning, he/she must appeal via the Financial Aid Satisfactory Academic Progress Appeal Request to apply for future financial aid eligibility. Appeal decisions are made by the MTCC Financial Aid/Scholarship Committee and are final. Only one appeal per academic year will be considered. (Financial Aid Appeal Policy in separate attached document).

### ***Financial Aid Appeal***

Students who have been unable to bring their completion rate and/or grade point average up to the acceptable standards required (67% of attempted courses and 2.0) after the financial aid warning stage will be allowed to appeal their financial aid suspension if any of the following mitigating circumstances apply:

- Death of an immediate family member
- Illness/Injury and/or Hospitalization of themselves or an immediate family member
- Change in academic program
- Other extenuating circumstances that were not foreseeable to the student and affected their ability to meet academic progress standards.

To appeal the suspension of financial aid, the student must submit a completed MTCC Financial Aid Satisfactory Academic Progress Appeal Request (available in the Financial Aid Section of the MTCC website) to the MTCC Financial Aid Office. Within this request, the student is asked to explain the circumstances surrounding their current Satisfactory Academic Progress (SAP) status, identify which appeal category best applies to their circumstances, give a personalized and detailed academic plan and documentation of the circumstances cited. Acceptable documentation could be doctor's and/or hospital notes, police reports, court documents and statements from witnesses that are privy to the past situation. The student is also asked to meet personally with their academic advisor about their plan and provide documentation that they have done so. The advisor and student will determine how many classes have been completed in the student's program and how many remain.

Appeal requests are accepted at any time; however, there are specific monthly deadlines each semester. Any requests received during the month will be evaluated after the appropriate submission date has passed. Complete appeals received by the submission date will be evaluated and a decision will be mailed within 14 to 21 days.

Each appeal is reviewed by the Director of Financial Aid for completion and adequate documentation. If the appeal is complete, the Financial Aid Subcommittee will be sent all appeal documents via MTCC e-mail. The committee members discuss the information and each sends a decision back to the Director. If the decision is not unanimous, the majority determines the decision. Students are then notified within 10 days via postal mail.

If the appeal is approved, a contract between the MTCC Financial Aid Office and the student is created by the Director. This contract outlines the requirements of the appeal which are as follows:

- Completion of all registered classes within the appeal semester with a semester grade point average of at least 2.5
- Completion of financial aid file
- Understanding that the contract is a result of an appeal and must be signed in the presence of the Financial Aid Director to be valid
- Understanding that if the student remains below standard despite successfully completing the current semester, he/she will remain on the contract as part of a continued plan until acceptable standards are met

If the appeal is denied, the student may then request a face to face interview with the Director of Financial Aid and the Financial Aid Subcommittee. The decision of the Financial Aid Subcommittee is final. Students are limited to one appeal per academic year.

Students attempting to regain financial aid eligibility remain ineligible for financial aid assistance until the appeal process is completed and a definite decision has been made. Students are informed of their responsibility to pay tuition, fees and book expenses



until that time.

## ***Title IV Repayment Policy***

Per Federal Financial Aid Regulations, students receiving financial aid from Title IV funds (Federal Pell Grant, Federal Supplemental Educational Opportunity Grant and/or Federal Direct Loans) will be required to repay a portion of their awarded financial aid if the student withdraws from all classes prior to the 60% point of the semester. If a student withdraws after the 60% point of the semester, 100% of all aid is considered earned. These requirements do not apply to any student who does not actually withdraw from all classes. For example, if a student enrolled in 12 credit hours withdraws from a three credit hour course only, because the student has nine remaining hours, this is not a complete withdrawal.

Students eligible for federal financial aid begin earning Title IV funds on the first day of class attendance. Students are awarded funds on the assumption that he/she is eligible for the full amount received. Students that stop attending classes should obtain a drop/withdrawal form from the Student Services department. Each instructor should be contacted so that the last day of attendance can be documented and the appropriate grade given. If the student ceases to attend without informing his/her instructor and/or the Registrar's office, the student will be withdrawn from classes by the instructor as the maximum absence number in the class is reached.

Once the student is withdrawn from all classes, the MTCC Financial Aid office is responsible for calculating any amount of overpayment based on the last date of attendance if the student completely withdraws from all classes. If the student withdraws prior to the 60% point of the semester, a calculation of unearned financial aid will be completed and the amount of funds owed by the school and student will be determined. If the student withdraws after the 60% point, the calculation will still be completed. However, the student will not owe return funds. If the student withdraws prior to the 60% point of the semester, he or she could be responsible for repayment in part to the US Department of Education (DOE), in addition to McDowell Technical Community College (MTCC). The student is given written notification via the US Postal Service of the amount that is owed due to overpayment.

There are two amounts that can be owed when the Title IV recalculation is done. The first amount is the portion of tuition, fees and books that the student did not earn. The school must initially return this portion and then the student is billed for this amount. The second amount is the portion of the financial aid disbursement that the student owes back to DOE.

The amount of repayment is due in full when notification is received. As long as there is any unpaid balance at MTCC or with DOE, the student will not be awarded financial aid funds. Additionally, any unpaid balance to MTCC will prevent the student from future registrations or receiving MTCC transcripts.

The College returns Title IV funds to the programs from which the student received aid during the payment period, in the following order, up to the net amount disbursed from each source:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant

The College will return their portion of unearned Title IV funds within 45 days of the date the institution determined the student withdrew.

The student is responsible for repaying their portion of the original grant overpayment that is in excess of the total Title IV grant funds that he or she received. Student overpayments of \$50 or less are not to be repaid. A written notification will be sent to the student by the Financial Aid Office.

A student is allowed 45 days from the date of notification to repay grant overpayments to the College. A student who does not repay their portion of the funds within 45 days becomes ineligible for Title IV funds.

If the payment is not made within 45 days, the College reports the student portion overpayment to NSLDS. At the same time, the College will refer to Borrower Services. The College mails the student a letter which informs him or her how to contact Borrower Services in order to set up a payment agreement or make arrangements to pay the debt in full.

The College requires the student to repay the College the school portion of for all unearned funds returned by the College to the US Department of Education. The student has 90 days to repay these funds to the College. If

the unearned funds are not repaid within the 90 days, the student's account will be turned over to the NC Department of Revenue for collection.

## ***Verification Policy***

Verification is the process of confirming the accuracy of student-reported data on the financial aid application. Only a portion of MTCC's student population will apply for federal/state financial aid. A percentage determined by the Department of Education (DOE) will be verified. All applications flagged by DOE are verified. MTCC will also request verification if there is conflicting information or a discrepancy and situation warrants investigation.

The following person(s) may be excluded from verification:

- Death of the student



- Student ineligible to receive Title IV aid due to a reason other than verification
- Student eligible to receive only unsubsidized loans (MTCC does not participate in the Federal Student Loan Program)
- Applicant verified by another school (letter from other school confirming verification process was completed is necessary)
- Both parents are mentally incapacitated (dependent student)
- Both parents or custodial parent are deceased (dependent student)
- Parents residing in country other than US and can't be contacted by normal means (dependent student)
- Parents can't be located because student does not have contact (dependent)
- Spouse has died or is mentally incapacitated (independent student)
- Spouse residing in country other than US and can't be contacted by normal means (independent student)
- Spouse can't be located because student does not have contact (independent student)
- Students have documents lost or destroyed due to natural disaster

#### Application/Verification Process

When the student applies for federal/state financial aid via FAFSA.gov, the option to link tax information directly from the Internal Revenue Service (IRS) is presented unless the student has divorced or separated during or after the tax year being used for the application. The following items can be directly imported from the IRS to the FAFSA (forms 1040, 1040A or 1040EZ):

- Type of tax return filed
- Filing status
- Adjusted gross income (AGI)
- Taxes paid
- Income earned from work
- Exemptions

In addition, the following items are also imported if filing 1040 or 1040A (not 1040EZ)

- Education credits
- IRA deductions
- Tax-exempt interest income
- Untaxed IRA distribution
- Untaxed pensions

There are three active verification tracking groups. Students selected for verification will be placed in one of these tracking groups by DOE.

#### V1 – Standard Verification Group

(Tax filers)

- Adjusted gross income
- US income tax paid
- Untaxed portions of IRA distributions
- Untaxed portions of untaxed pensions
- IRA deductions and payments
- Tax-exempt interest income
- Education credits
- Household size
- Number in college

(Non-tax filers)

- Income from work
- Household size
- Number in college

#### V4 – Custom Verification Group

\*This group verifies high school completion and identity/statement of educational purpose

#### V5 – Aggregate Verification Group

\*This group verifies high school completion and identity/statement of educational purpose in addition to all the items in V1 – Standard Verification Group

All verification groups will complete the appropriate form(s) and provide documentation (forms available in the MTCC Financial Aid Office) and via [www.mcdowelltech.edu](http://www.mcdowelltech.edu) (under Tuition and Financial Aid). Forms must be legible and signed by the applicant

(independent) or applicant and parent (dependent).

The deadline for verification documentation for the 2021-2022 academic year is September 21, 2022 or 120 days after the last day of the student's enrollment, whichever is earlier. If all information is not received by the deadline, the student forfeits their rights to any aid that might have been eligible for during that academic year.

A student may be eligible for a late disbursement if all verification documentation is received after that time. To be considered for a late disbursement, the Department of Education must have processed a SAR or ISIR with an official EFC while the student was still enrolled.

Prior to starting the application process, students and parents (if necessary) are given the opportunity to create a Student Financial Aid (FSA) ID. This ID is used to log into the FAFSA form and can be used to sign the FAFSA electronically. The ID is also required if the student and/or parent wishes to attempt to use the IRS retrieval tool. The student and parent of dependent students are required to create and maintain a FSA ID. If either are unable to create an ID, a signature page can be printed from the FAFSA form and submitted via US mail.

If a student is selected for verification in groups V1 or V5 and is unable to use the IRS retrieval tool, a tax transcript from the IRS will be requested from the student and he/she will provide it to the MTCC Financial Aid Office. The procedure for requesting a tax transcript is described on the verification form related to the group. If a student has requested and been unable to receive a tax transcript, an actual tax return can possibly be used. The tax return must be signed and presented with all W-2s.

Documentation of taxed/untaxed income and or filing status that is seen as conflicting will be requested by the MTCC Financial Aid Office. All independent students or parents of dependent students that claim no tax return has been filed for the year being reviewed, will be asked to request a 'Verification of Non-Filing Status' form from the IRS. Instructions for requesting this form may be found on the Non-Tax Filers Worksheet.

In addition, any student that is flagged with a 'C' code indicating a database mismatch will be asked to resolve the issue prior to aid being processed. Examples of circumstances warranting a 'C' code include:

- No selective service verification
- No citizenship verification
- Social security number/name discrepancy
- Defaulted student loan or one cancelled for disability purposes
- Unusual enrollment history

After all documents are presented to the MTCC Financial Aid Office, the student's ISIR is compared to what is received. Any conflicting data or items will be updated by the FA office and processed back through DOE to make the necessary corrections.

Students are initially notified of their verification status via their go.mcdowelltech.edu email address. The student is sent a letter via US Postal mail with information regarding the email account and how to access it. Students are asked to present all documents to the MTCC financial aid office. After all documents are received and any necessary changes are made, the student is awarded if eligible. The student is notified of eligibility and award amount via their MTCC WebAdvisor account.

Referrals to the Office of Inspector General of the Department of Education

If after the application for financial aid is reviewed, it appears that the applicant is purposefully engaged in fraud or other criminal misconduct in order to gain eligibility for Title IV, HEA program assistance or to change their amount of assistance, the MTCC financial aid office is required to and will make a referral to the Office of Inspector General as potential fraud.

Examples of this type of information could be but are not limited to:

- False claims of independent student status
- False claims of citizenship
- Use of false identities
- Forgery of signatures or certifications
- False statements of income

Additionally, any credible information that indicates an employee, third-party servicer or agent of the institution that serves in a

position that administers Title IV or HEA assistance, may be engaged in fraud will be reported to the OIG.

The institution refers any fraudulent activity that is relevant to the eligibility and funding of MTCC and our students.

## ***Types of Aid***

### **I. Government Aid Programs**

#### ***Pell Grant***

The Federal Pell Grant Program provides the foundation on which the financial aid package is developed. Students begin the financial aid process by completing the Free Application for Federal Student Aid (FAFSA). From this application, an expected family contribution (EFC) is calculated to determine the family's contribution to the student's education. This figure is used by the Financial Aid Office to determine the amount of the Pell Grant award. Federal Pell Grant awards can range from \$639 to \$6,345 per academic year depending on enrollment status.

#### ***Supplemental Educational Opportunity Grant (SEOG)***

This grant is awarded to students with exceptional financial need. Limited funds are available with priority given to students receiving Pell Grant funds with a low expected family contribution. Priority is given to students completing their FAFSA prior to March 15.

#### ***Federal Work-Study (FWS)***

A limited number of part-time employment positions are available to eligible students on campus. The work-study program provides students with an additional means of contributing to their educational costs. When possible, students are placed in an area of work which matches their career interests and skills.

#### ***Vocational Rehabilitation***

Students who have a substantial handicap to employment from a physical or emotional problem may be eligible for funds through the N.C. Division of Vocational Rehabilitation. Application should be made through the V.R. Office in the county of residence.

### **II. State Aid Programs**

#### ***North Carolina Community College Grant (NCCCG)***

North Carolina residents that have completed the Free Application for Federal Student Aid to determine eligibility for Pell Grant may also be eligible to receive the NCCC Grant. Students must be enrolled in at least six credit hours in an eligible program to be considered for this grant. If eligible, students are awarded this grant for Fall and Spring Semesters (no award is available for Summer Semester). Students must be enrolled in 15 credit hours or more to receive the full-time plus amount. The guidelines for this grant are different than those for Pell Grant; therefore not all Pell Grant recipients will be eligible. No additional application is necessary; eligibility is determined from the FAFSA.

#### ***North Carolina Education Lottery Scholarship (NCELS)***

North Carolina residents that have completed the Free Application for Federal Student Aid to determine eligibility for Pell Grant may also be eligible to receive this scholarship. Students must be enrolled in at least six credit hours in an eligible program to be considered for this scholarship. If eligible, students are awarded this scholarship for Fall and Spring Semesters (no award is available in Summer Semester). The guidelines for this grant are different than those for Pell Grant and NC Community College Grant; therefore not all Pell Grant recipients will be eligible. No additional application is necessary; eligibility is determined from the FAFSA.

#### ***Forgiveable Education Loans for Service (FELS)***

This program is made possible through the North Carolina State Education Assistance Authority and allows students to obtain the degree they want and repay the loan funds by staying in North Carolina in areas with a critical need for more employees, such as nursing, teaching, allied health fields or medicine. Recipients of this loan sign a promissory note agreeing to work in North Carolina after graduation in an approved position for each academic year of funding received. Students should visit [www.cfnc.org/FELS](http://www.cfnc.org/FELS) for details on requirements and the application process.

#### ***Golden LEAF Scholars Program--Two-Year Colleges***

This scholarship is funded through a grant from the Golden LEAF Foundation, a non-profit organization hoping to help North Carolina's economy. Selection factors include the effects of the declining economy on students and their families. The scholars program provides up to \$750 per semester for curriculum students and \$250 per semester for occupational education students. Students may apply by completing a Golden LEAF scholarship application. These are available in the MTCC Financial Aid Office.

#### ***Less Than Half Time Grant***

Funds for this grant are provided by the NC Department of Community Colleges. Students must be enrolled for less than six credit hours and fall within specific EFC (expected family contribution) limits to be eligible for these funds in Fall and/or

Spring semesters. No additional application is necessary; eligibility is determined from the FAFSA.

#### ***Targeted Assistance Grant***

Funds for this grant are provided by the NC Department of Community Colleges. Students must be enrolled in one of the following programs to be considered for this grant: Machining Technology, Industrial Systems or Electrical/Electronics. No additional application is necessary; eligibility is determined by the FAFSA.

#### ***WIOA***

A possible source of educational assistance for unemployed and/or underemployed individuals is WIOA benefits. Interested individuals should contact the NC Works Career Center for more information and eligibility criteria.

### **III. Institutional Aid**

#### ***McDowell Technical Community College – Board of Trustees Scholarship***

The MTCC Board of Trustees Scholarship is awarded by the MTCC Scholarship Committee to four (4) students per year for \$200 per semester. This scholarship is based on financial need. Applications are available in the Financial Aid Office at MTCC.

#### ***Crane Fund for Widows and Children***

Crane Resistoflex Corporation provides scholarship funds for needy and deserving widows and/or children or deserving wives and/or children of men who provide limited support due to age and disability. Applications are in the MTCC Financial Aid Office.

#### ***MTCC Foundation***

The following scholarships are available through the MTCC Foundation:

- McDowell County Chapter of the NAACP
- McMahan Family Scholarship
- Vickie A. Hogan Memorial Scholarship

### **IV. Other Scholarships**

In addition to the above programs, various companies, organizations and individuals provide scholarships as funds allow.

#### ***American Society for Quality Control Fund of the Community Foundation of WNC***

This scholarship opportunity is available to students who aspire to continue their education in advanced studies in a field which relates to quality control. To be eligible to apply, the student must be a high school graduate or possess an equivalency certificate and be a resident of a county within Western North Carolina. Applications are available in the MTCC Financial Aid Office.

#### ***Route 70 Cruisers Scholarship***

This scholarship opportunity was established in 2012 by the Route 70 Cruisers, a local car club from Old Fort, NC. These scholarship funds are designated for students pursuing an education in the automotive industry. One scholarship is awarded annually to a student in the Automotive Systems Technology program and another to a student in the Collision Repair and Refinishing Technology program. Recipients must have a strong desire to pursue a career in the automotive industry and have financial need.

#### ***State Employee's Credit Union Foundation Scholarship***

The SECU Foundation established this two-year scholarship program to assist NC Community College System students achieve academic success. Students must be a resident of North Carolina, demonstrate financial need per results of current FAFSA, be enrolled full-time and maintain a grade point average of at least 2.5 in order to be eligible to apply. Two scholarships are awarded annually. Applications are available in the MTCC Financial Aid Office.

#### ***State Employee's Credit Union Workforce Development Scholarships***

Six \$500.00 Workforce Development Scholarships are awarded annually for students enrolled in short-term workforce training that meets specific requirements. Applications can be obtained from the Continuing Education Department.

#### ***Wells Fargo Technical Scholarship***

The Department of Community Colleges makes the Wells Fargo Technical Scholarship available to second-year students in a two-year technical program who demonstrate financial need and show academic promise. One scholarship is awarded yearly. Applications are available in the MTCC Financial Aid Office.

#### ***William Harold Smith Scholarship***

The William Harold Smith Charitable Trust provides scholarship assistance to graduates of McDowell High School attending a postsecondary institution. Awards are based on need and may be renewed as long as the recipient maintains satisfactory academic progress. Applications are available in the Financial Aid Office or at McDowell High School. Applications must be submitted each semester for which aid is requested.

## V. Veterans Benefits

### ***U.S. Department of Veterans Affairs Benefits***

McDowell Technical Community College is approved by the North Carolina State Approving Agency for the enrollment of persons eligible for education assistance benefits from the U.S. Department of Veterans Affairs (DVA). Entitled veterans, participants in the Montgomery G.I. Bill contributory program, active duty military personnel in voluntary education programs, active members of the National Guard who are drilling, and eligible spouses and offspring who may be certified to the U.S. DVA Regional Office as enrolled and in pursuit of an approved program of education. This institution has been approved for one semester only of provisional admission. Due to late registration, some students may fail to have all admissions documentation (transcripts or test scores) and may be admitted as provisional students for one semester pending receipt of the required documentation. However, students who fail to submit all transcripts during the second semester will not be re-certified.

### ***Dual Programs***

McDowell Technical Community College is approved for Veterans' Affairs students to pursue dual programs simultaneously. Students desiring a second program must meet with the Veterans' Certifying Official and their advisor to complete a Dual Program Approval Form and follow the guidelines listed in the college catalog. Students must meet certain criteria to be certified for Veterans' Affairs benefits while seeking completion of dual programs. Dual programs must be related to a single career field.

### ***DVA Standards of Progress, Attendance and Conduct***

Public Law 93-508 requires that each educational institution approved for veterans to receive educational benefits (GI Bill) must establish written policies that clearly state what is expected of the veteran in the areas of academic progress, class attendance and conduct. Many of these expectations are required of all students, veterans and non-veterans, and are covered in this Catalog and Student Handbook.

Further requirements include that any recipient of veteran's benefits: (1) who withdraws from all subjects undertaken will have his or her educational benefits terminated from the last date of attendance; (2) who drops any of his or her courses may have benefits reduced; and (3) must maintain a level of satisfactory academic progress. Students are considered to be making unsatisfactory progress if they have not achieved a level of progress consistent with their time in the program. Veterans who are making unsatisfactory progress will be terminated by the Veterans Certifying Official. When performance meets the level of satisfactory progress, the recipient may be recertified. Recipients of DVA benefits need to consult the Veteran's Certifying Official before enrolling in telecourses, Cooperative Education classes, Internet classes, or making course substitutions.

### ***Veterans Pay Schedule***

For accuracy, a veteran should contact the U.S. Department of Veterans Affairs Regional Office in Atlanta, GA, at 1-888-442-4551 for an assessment of benefits which they may receive. Benefits will vary according to many criteria. *A period of six to ten weeks should be allowed for receipt of the Veterans Administration subsistence check.*

For more information about programs available at this institution, contact the campus Veterans Certifying Official in the MTCC Financial Aid Office.

# Services To Students

The Student Services Office at McDowell Technical Community College is responsible for various types of student assistance: admissions, counseling, orientation, testing, supervision of and assistance in planning student activities, financial aid, placement of graduates, school publications and community-school relations.

## Objectives

McDowell Technical Community College, operating under the “Open-Door” admissions policy of the North Carolina Department of Community Colleges, is committed to taking prospective students and placing them in a program of study commensurate with their interests and abilities through counseling, guidance and testing. As a result of this commitment, the Student Services Office must respond to the needs of a diverse student population. The ultimate objective is total service to the student and to the community. Specifically, the objectives can be broken down as follow:

1. To provide information to prospective students and the community on opportunities available at McDowell Technical Community College.
2. To provide a counseling and testing program to assist prospective students in selecting a suitable program of study.
3. To orient new students to the college environment.
4. To provide and assist in the development of a program of student activities.
5. To provide for the maintenance and utilization of student records.
6. To identify and utilize all community resources which can be used to the advantage of the student, school and community.

These objectives support the educational programs and the philosophy of McDowell Technical Community College so that each student can reach his/her fullest potential. The student is encouraged to seek the assistance available in the Office of Student Services.

## Programs of Assistance

### Orientation

At the beginning of each semester, new students must attend New Student Orientation (NSO) either online or face-to-face. Orientation helps acquaint students with basic ideas, procedures, student supports and learning resources, academic areas, administrative personnel and services of the college.

NSO is mandatory and students who do not attend face-to-face or online will receive a hold on their account, which will prevent future registration. Online NSO can be accessed online through the MTCC website at [www.mcdowelltech.edu/nso/](http://www.mcdowelltech.edu/nso/). For additional questions, please email [jbpadgett89@go.mcdowelltech.edu](mailto:jbpadgett89@go.mcdowelltech.edu) or call 828-652-0631.

### Health Services

The College does not have a health clinic to provide hospitalization or emergency services. The physical location of the College campus is easily accessible to hospital facilities in both Marion and Morganton. In the event of an emergency, EMS ambulances are available on a 24-hour schedule; phone 911.

First-aid supplies are available in all shop areas and in each campus building.

If a student becomes ill during class and is unable to go by him/herself to the first aid station, it is the responsibility of the individual's instructor to accompany the student there. If the student is unable to contact a parent, spouse or relative, then the instructor should contact the Student Services Office (or the Receptionist after 8:00 pm), who will contact the parent, spouse or relative.

In the event of serious accident or sickness, the following procedures should be followed:

1. Summon EMS ambulance service.
2. Make the person as comfortable as possible WITHOUT MOVING HER/HIM UNTIL HELP ARRIVES.
3. As soon as possible, notify the Safety Director at 652-0627 or the receptionist at extension 0.

**Note:** The College's *Comprehensive Safety Plan* is posted on the College website ([www.mcdowelltech.cc.nc.us](http://www.mcdowelltech.cc.nc.us)) under the heading *General Information*.



Any student enrolling in the College may complete a student medical (health) data form. This information may be used for the purpose of referral in the event of an emergency and to notify appropriate personnel of conditions which may affect the student's enrollment in a particular program.

### ***Health-e-Schools***

MTCC is a part of Health-e-Schools. This is a program that provides medical care to clients in the place where they spend most of their time-school or work! Our staff can provide access to medical care to students/employees, without students/employees missing school or work. This program helps the student/employee stay healthy, decreases school/work absences, and reduces out-of-work, travel, and wait time. Telemedicine is available at MTCC every public school day and appointments can be arranged during non-core classes (call 828-659-0646). For more information about how we do this, please visit our website at [www.myhealthschools.org](http://www.myhealthschools.org)

### ***Student Enrichment Center***

The Student Enrichment Center provides a variety of testing and student support services. These include: placement testing, career assessments and personality inventories to explore student interests and aptitudes, career counseling services, and tutorial assistance services.

The Student Enrichment Center operates the MTCC Student Tutorial Program. Students interested in participating in the program as a tutor or those desiring tutorial assistance should contact the Center for further details.

The campus contact for job placement is also located in the center.

All Student Enrichment Center services are free to the MTCC student. Walk-ins are accepted; however, appointments are encouraged to guarantee the student these services in a timely manner.

### ***Placement Testing and RISE- Reinforced Instruction for Student Excellence***

The Pre-College (Developmental) program uses the Reinforced Instruction for Student Excellence (RISE) model. The RISE model places students into one of three pathways based primarily on their high school GPA and replaces prerequisite remediation with co-requisite remediation.

A high school GPA is the first placement measure for RISE. High school graduation must be from a U.S. high school within the past 10 years. **The only applicants who will be required to take a placement test are those who graduated from high school more than 10 years ago (or from a foreign high school) and fall outside the other RISE criteria or who did not take Math 2 in high school.**

#### **RISE Placement**

HS GPA 2.8+	Gateway math or English without co-requisite
HS GPA 2.2-2.799	Gateway math or English co-requisite
HS GPA <2.2	Transition Math Course and/or Transition English Course

**College level placement into English and math courses (without co-requisites) can also be attained by the following methods:**

- Submit official ASSET, Accuplacer or COMPASS scores taken within the last ten years from another college.
- Submit an official transcript showing completion of college level English or math at an accredited college with a grade of C or better.
- Submit proof of an ACT English score of 18 and ACT Reading score of 22 within the last ten years.
- Submit proof of an ACT Math score of 22 taken within the last ten years.
- Submit official SAT scores taken since March 2016- with scores above 480 for Evidenced-Based Reading and Writing and above 530 for Mathematics. Older scores within ten years may also be used under different criteria.

Contact the Student Enrichment Center if you have questions about placement and the RISE Placement Test at 659-0418.

### ***Placement Testing Rules***

- Must have an application on file with Student Services.
- Must make an appointment with the Student Enrichment Center. Discuss special needs or concerns related to testing at that time. Persons with disabilities may request special accommodations and need to do so when scheduling the testing appointment to allow adequate time for needed arrangements to be made. Official documentation verifying the disability and the need for special accommodations must be submitted prior to testing. Special accommodations include, but are not limited to, braille, large print materials and tests on audiotape.
- Must bring MTCC Student Identification Number and have a picture ID. Pencils and scrap paper will be provided.



- Placement test scores are considered current for ten years. If you have not attended MTCC in ten years or more, new placement test scores may be required. Returning students who have successfully completed all developmental courses within the last 10 years will not be required to retest unless there has been a change of major which requires higher levels of math or English.

### ***Reinforced Instruction for Student Excellence (RISE)***

McDowell Technical Community College has implemented a Reinforced Instruction for Student Excellence (RISE) initiative to identify and assist students with academic weaknesses. A student whose criteria falls below proficiency levels determined by the RISE measures is required to enroll in the transition and/or co-requisite courses appropriate for the identified weakness.

Required transition courses are prerequisites for math and English gateway courses and must be taken before entering gateway courses. Co-requisite courses are taken at the same time as the gateway math or English courses.

The transition and co-requisite courses may also be taken by others, at the student's initiative, or on the recommendation of a faculty member (except for those receiving Veteran's Benefits).

### ***Academic Resource Center (ARC) Lab***

The Academic Resource Center (ARC) serves as a common computer lab for all students. It provides students free access to computers and the internet in order to fulfill technological requirements in their courses at MTCC. Students may bring their own laptops to the ARC where they will be able to find power outlets and access wireless internet.

The ARC also provides free tutoring in basic math and English topics during specified times each semester. Students do not need to set up an appointment to receive this free tutoring, but they do need to check on the times of availability each semester. Other resources available to students in the ARC Lab include math DVDs, textbook software, and remedial software that can enhance student learning.

Proctoring is available in the ARC Lab anytime during the hours of operation, when classes are in session. All proctored exams must be completed at least 30 minutes before closing time. There is a charge of \$25.00 per test for proctoring services for non-MTCC students. Proctoring fees may be paid in person in the Business Office. Fees must be paid prior to the testing appointment. Students must bring this receipt of payment to their scheduled proctoring appointment.

### ***Career Planning and Development***

Educational objectives generally are pursued by students for the purpose of preparing themselves for the world of work or for job mobility. The function of all personnel involved in the educational process is to provide ways and means to assist the student in career planning and individual development. Please contact the Student Enrichment Center for career assessments and exploration.

### ***Job Placement***

The College offers job placement assistance through the Student Enrichment Center and the NC Works Career Center. A job placement counselor is available for the purposes of referral to the NC Works Career Center/Ford Miller Employment and Training Center. Although employment cannot be guaranteed by McDowell Technical Community College, every effort is made to notify students of job opportunities and assist them in securing positions of employment. The NC Works Career Center/Ford Miller Employment and Training Center provides resume preparation, counseling, and assists students in securing employment. Up-to-date job openings are posted and available on-line through resources provided at the NC Works Career Center/Ford Miller Employment and Training Center. Short-term employability skills classes are available to those seeking employment.

Students interested in full or part-time jobs are asked to complete a NC Works Customer Profile and have a conference with NC Works staff.

Students are also encouraged to utilize the services of the North Carolina Division of Workforce Solutions located on Baldwin Avenue at NC Works Career Center/Ford Miller Employment and Training Center in Marion, NC for job placement assistance.

### ***Campus Security***

The Security office is located just inside the front entrance of the Administration Building. Members of the Security Staff are available to serve you with any crisis, emergency or security situation that may arise. They can be reached immediately by telephone at cell number 442-1084, or at the office line, 652-0673. Otherwise, dial "0" on our local land line. Please feel free to call Security staff for any security needs you may have. They are there to serve you.

# *Student-Oriented Policies & Procedures*

## *Diversity and Non-Discrimination*

### *Diversity*

McDowell Technical Community College values diversity and desires to create a situation where all persons, regardless of race, sex, age, national origin, religion, disability or other factors, may realize their fullest potential. To this end, the college prohibits discrimination of all kinds in programs, services and employment. Our policies are also located in the Employee Handbook with copies placed in the MTCC Library.

### *Non-Discrimination Policy*

It is the policy of McDowell Technical Community College that no individual shall, on the basis of sex, age, religion, race, color, national/ethnic origin, disability or political affiliation, be excluded from participation in, be denied admission to or the benefits of, or be subjected to discrimination in his/her education program, as required by Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990 (ADA). Any student who feels he/she has been discriminated against should contact Breanna Wilson, Business Office and Human Resources Manager, MTCC, 54 College Drive, Marion, NC 28752 Phone (828)652-0618. In addition, he or she may consult with or write to the Office for Civil Rights, District of Columbia Office, U.S. Department of Education, 1100 Pennsylvania Avenue., NW, Room 316, P.O. Box 14620, Washington DC 20044-4620.(202)786-0500

### *Provisions for Persons With Disability*

McDowell Technical Community College provides equal access to education for persons with disabilities in compliance with Section 504 of the Rehabilitation Act and Americans with Disabilities Act. It is the responsibility of the student to make his or her disability known and to request academic adjustments of modifications each semester. The Disabilities Coordinator advises and assists in securing academic adjustments, support services and other provisions for qualified students with disabilities. Request for modifications, adjustments or accommodations should be made 30 working days before events or activities and submitted to the Disabilities Coordinator. Every reasonable effort will be made to make reasonable adjustments.

In order to establish the student's eligibility for services, documentation of disability is required of all students who request academic accommodations or modifications. Documentation should be submitted to the Disabilities Coordinator and may include results of medical or psychological tests or other professional evaluations that verify the existence of an ADA-recognized disability. Students with learning disabilities should provide a current psychological evaluation that states the specific learning disability and the functional limitation within the learning environment. All documentation and records will be maintained in a confidential manner as outlined in the Family Rights and Privacy Act of 1974.

College procedures for application and admission apply to students with disabilities. For additional information, contact the Disabilities Coordinator.

### *Student Grievance Procedure*

It is the policy of McDowell Technical Community College to provide all students with the means to seek resolution to any problem affecting their enrollment. The primary objective of a grievance procedure is to ensure that student rights are protected. Further, it is essential that the student be given adequate opportunity to bring valid complaints and problems to the attention of the College with the assurance that student's grievances will be handled fairly, rapidly, and in a non-threatening atmosphere.

A grievance is defined as the dissatisfaction that occurs when a student has reason to believe a condition or a situation, or an action affecting the individual is unjust, inequitable, and/or a hindrance to effective performance. A grievable action is an action that is in violation of written campus policies or procedures or constitutes arbitrary, capricious, or unequal application of written campus policies or procedures.

In implementing a grievance policy, the College emphasizes the importance of rectifying any issues before utilizing the grievance policy. All students and faculty members, administrators, or staff members have an obligation to make every effort to resolve problems fairly and informally so that they do not become sources of grievances to be pursued formally through the grievance procedure. However, the College realizes that all problems cannot be corrected with an informal

resolution. The procedure is not intended to initiate disciplinary action against a student or a member of the faculty, staff, or administration; or to alter college policy. It is important to note that all matters will be handled in a professional manner and parties will be treated professionally and fairly with no retaliation before, during and after the grievance procedure.

### ***Procedures***

A formal complaint may be filed any time by students who believe that a personal right has been violated. The following procedure is established to provide prompt and equitable resolution as they relate to claims of discrimination based on age, sex, (including sexual harassment) religion, race, color, national/ethnic origin, disability or political affiliation, or have been excluded from participation in, be denied admission to or the benefits of, or be subjected to discrimination in his/her education program. (Because of the private and sensitive nature of certain incidents, an aggrieved student may choose a third party mediator to help resolve complaints on an informal basis.)

The following outlines the grievance procedure:

1. Students with concerns should first discuss their problem with the faculty or staff member(s) who are involved. (A third party may be present.) All parties should attempt to resolve the issue in discussion.
2. If the issue is not resolved, the student must talk with the faculty/staff member's immediate supervisor within ten working days, who will attempt to resolve the complaint.
3. In the event that the grievance cannot be resolved within the department, students should submit a written grievance to the Vice President for Learning and Student Services within thirty working days after completion of step # two (2). The complaint should specify the time, place, and nature of the incident that resulted in the complaint. (Forms are available in the Student Services Office and on the MTCC website [www.mcdowelltech.edu](http://www.mcdowelltech.edu))
4. Copies of the complaint will be forwarded to the appropriate administrator of the area involved.
5. Within ten working days, the Vice President for Learning and Student Services will contact all parties involved (including third parties) and request a meeting.
6. If the situation cannot be resolved during the meeting in Step # 5, the Vice President for Learning and Student Services will establish the Grievance Committee within twenty working days. The student or employee may have persons appear on his/her behalf provided that a list of names is given to the Chairperson of the Grievance Committee five school days prior to the meeting. (The Committee with guidance from the Chair [who will receive appropriate training for the procedure] will investigate and evaluate all information provided. A period of ten days is allowed for this process.) The student or employee portion of the Grievance Committee meeting shall be taped to ensure that a full and accurate record of the information presented is available to the student or employee and committee members and to facilitate the writing of the minutes of the meeting. Copies of the tape may be made for the student at cost. The discussion following the student part of the meeting is considered a closed session.

The Grievance Committee shall consist of:

1. Chairperson (non-voting member).
  2. Student Services administrator. This person will serve as student advocate. (Non-voting member).
  3. Two faculty members, at least one being from the same department as the aggrieved student.
  4. Two students: the President of the SGA and one other student elected by the SGA.
  5. One administrator: appointed by the College President.
7. Five (5) voting members are required before a vote can be taken. The decision of the Grievance Committee shall be by majority vote. Within ten (10) school days, the Grievance Committee shall submit its findings of facts and recommendations to the Vice President for Learning and Student Services. This will serve as the final decision. The Vice President for Learning and Students Services will make the student aware (in writing) within ten (10)days the decision of the Grievance Committee.
  8. If the Grievant is not satisfied with the decision of the Grievance Committee, he/she may appeal the decision to the President. The appeal must be made to the President in writing within ten working days. The President will review all procedures and meet with the student.
  9. The President will render a decision within ten working days. In all cases, the President's decision shall serve as the final governing authority of the College.

### ***Post-Secondary Education Complaints: Student Complaint Process***

In compliance with state regulations and the rules promulgated by the U.S. Department of Education, the University of North Carolina is committed to implementing a student complaint process that is fair, timely, and effective. This policy establishes a process by which students can initiate complaints against a post-secondary institution offering programs in

the State of North Carolina when all other forums at the institutional level have been exhausted. The University of North Carolina System Office, serving as the clearinghouse for complaints concerning post-secondary institutions that are authorized to operate in North Carolina, will act upon those complaints within its purview and forward all other complaints to the appropriate agency.

If you have questions about this process, please email student complaints to <https://studentcomplaints.northcarolina.edu>

### ***Equal Opportunity/Affirmative Action Institution***

McDowell Technical Community College is an Equal Opportunity/Affirmative Action Institution in compliance with all policies on non-discrimination. The College has an Affirmative Action Plan. The Affirmative Action Officer for McDowell Technical Community College is the VP for Finance and Administration. The contact number is (828) 652-0627.

## ***Code of Student Conduct***

### ***Proper Conduct***

The College has a responsibility to ensure students an optimum opportunity for learning. That responsibility includes providing a healthful and safe environment, protecting property and records, and supporting the laws of the community, state and nation. In order to maintain an appropriate environment for study and learning, the College expects students to conduct themselves as mature, responsible adults.

### ***Dismissal for Improper Conduct***

Personal conduct that detracts from the educational process will not be tolerated. The College reserves the right to dismiss any student who disrupts the learning environment.

### ***Social Media Guidelines***

The purpose of McDowell Technical Community College (MTCC) social networking sites such as Facebook, Twitter, and YouTube is to support the College's mission, programs, services, and events by offering news and information to the students, faculty, staff, and friends of MTCC. Social media sites are valuable as they provide a method for disseminating information. These procedures are also subject to the addition of other forms of social media. MTCC encourages feedback and comments from prospective students, current students, alumni, faculty, staff, and members of the community. MTCC remains committed to maintaining these sites as safe and family-friendly forums for sharing information.

Guidelines are provided in order to protect the College's reputation and image. The establishment of guidelines ensures information follows the same high standards as printed and web publications.

In an effort to maintain a positive environment for MTCC website visitors, MTCC reserves the right to remove or block posts, users, or any content from official college-sponsored pages.

MTCC expects users to comply with the social website's terms of service.

- Facebook Statement of Rights and Responsibilities
- Instagram Terms of Service
- Twitter Terms of Service
- YouTube Terms of Service
- WordPress Terms of Service

### ***Social Media Guidelines for Students***

Online behavior that violates the college's Student Code of Conduct or the Appropriate Use of Computing Resources Policy which is brought to the attention of the Vice President of Learning and Student Services, will be treated as any other violation of the Student Code of Conduct.

The following types of content are prohibited from the MTCC social networking sites:

1. Derogatory language or demeaning statements about or threats to any third party;
2. Lewd, indecent, or incriminating images or information depicting hazing, sexual harassment, vandalism, stalking, underage drinking, illegal drug use, or any other inappropriate behavior or inappropriate language;

3. Content that violates local, state or federal law;
4. Online gambling;
5. Content that harasses any third party or personal attacks of any kind;
6. Selling goods or services for personal financial profit;
7. Comments or posts that are unrelated to MTCC;
8. Spam;
9. Infringement on copyrights or trademarks; and/or
10. Offensive comments that target or disparage any ethnic, racial, religious, or other group of people.

If you have questions or concerns about a post or comment, the Director of Communications. If a sanctioned student club or organization wishes to create a social media web page, the faculty advisor must follow the procedures outlined under Social Media Guidelines for Employees in the MTCC policy and procedure manual.

**Note: Refer to Individual Program handbook for potentially more stringent policy and consequences.**

### ***Sexual Misconduct, Dating Violence, Domestic Violence and Stalking Policy***

McDowell Technical Community College provides and is committed to maintaining programs, activities, and an educational and work environment founded on civility and respect, where no one is unlawfully excluded from participation in, denied the benefits of, or subjected to discrimination in any College program or activity on the basis of sex.

Sexual Misconduct, dating violence, domestic violence, and stalking are forms of sex discrimination that may deny or limit an individual's ability to participate in or benefit from College programs or activities and thus are inconsistent with the values and standards of the College community; incompatible with the safe, healthy environment that the College community expects and deserves; and will not be tolerated.

It is the policy of the College to provide educational, preventive, and training programs regarding sexual misconduct, dating violence, domestic violence, and stalking; encourage reporting of these behaviors; take appropriate action to prevent incidents from denying or limiting an individual's ability to participate in or benefit from the College's programs; make available timely services for those who have been affected; and provide prompt and equitable methods of investigation and resolution to stop discrimination, remedy any harm, and prevent its recurrence.

The College is committed to fostering a community that promotes timely and fair resolution of sexual misconduct, dating violence, domestic violence, and stalking allegations. To that end, the College has appointed a Title IX Coordinator to oversee the investigation and resolution of such allegations and has adopted investigation and resolution procedures. Any allegation of sexual misconduct, dating violence, domestic violence, or stalking involving any member of the College community, occurring on College property, and/or occurring off of College property (if the conduct giving rise to the allegation is related to the College's programs or activities) will be investigated by the College's Title IX Coordinator pursuant to the appropriate procedures.

The Title IX Coordinator is Breanna Wilson, Business Office and Human Resource Manager, who can be reached at 828-652-0618.

### ***Policy on Publications- Classroom use of equipment/materials/supplies***

McDowell Technical Community College strives to maintain up-to-date computers, printers, supplies and materials to be utilized by instructors and students.

MTCC's equipment, including computers, printers, laboratory equipment, shop equipment, and supplies and materials are to be used for curriculum-coursework projects only.

Any equipment/materials/supplies utilized by students or staff for personal use or for monetary gain are prohibited.

Any work produced must have the approval of the instructor and/or administration to be displayed within any area on campus.

Any student observed not following the above regulations may be subject to suspension or dismissal from the College for the semester or longer.



### ***Dress Code Policy for Students***

The following expectations for student dress have been established and approved by the McDowell Technical Community College Administration and the McDowell Technical Community College Board of Trustees.

The following dress code shall be observed by all McDowell Technical Community College students:

1. Any clothing or accessory that is deemed offensive causing a distraction and hampering the learning environment is prohibited.
2. Clothing and accessories must be appropriate to the classroom/lab setting to provide a safe learning environment.
3. Footwear is required and must be safe and appropriate for classroom/lab activities.
4. Jewelry and accessories that are safety hazards or could be used as weapons are prohibited.

The President, Vice President of Learning and Student Services, and Deans may allow exceptions to the dress code only on special occasions, such as Student Government activities. Further dress requirements may be prescribed by the above persons for certain classes, such as physical education, vocational, and health science classes.

Violations of the dress code procedures and regulations shall result in disciplinary action as follows:

1st violation: Verbal warning by instructor. Instructor will document the offense and forward a referral to the appropriate Dean and Vice President for Learning and Student Services for the record.

2nd violation: After speaking with the student and the situation cannot be resolved, the instructor will present an official letter stating concerns and suggested actions to the appropriate Dean, the Vice President for Learning and Student Services and the President

3rd violation: Administration will investigate the situation. Depending on the results of the investigation, the student will be subject to suspension and/or dismissal from the college for the duration of the semester or longer.

### ***Basis for Suspension or Expulsion; Types of Inappropriate Conduct***

Expulsion, suspension from the College or a lesser sanction may result from the commission of any of the following offenses:

1. Academic Dishonesty (Plagiarism) - Students will not give or receive help during tests; will not submit papers or reports (that are supposed to be original work) which are not entirely their own; and will not cite source materials improperly. Sanctions will include receipt of a failing grade in applicable coursework and disciplinary probation for a first offense. The instructor of the course in which the infraction occurred, or the Dean of Curriculum Programs or the Dean of Health Sciences will deal with this offense.
2. Willfully representing the College or a student organization without that group's permission or representing improperly the identity of any other individual member of the campus community.
3. Violation of the terms of disciplinary probation or of any College regulation during the period of probation.
4. Lewd or indecent conduct, including public physical and/or verbal actions and distribution of obscene or libelous written materials.
5. Possession, distribution or use of alcoholic beverages/controlled substances or being in a state of intoxication on the College campus or during a college-sponsored activity.
6. Possession, use or distribution of any narcotic drugs, amphetamines, barbiturates or similar agents except as expressly permitted by law. ("Narcotic" and "dangerous drugs" are as defined by agencies of the State of North Carolina and/or the United States Government.) Any influence which may be attributed to the use of drugs or alcoholic beverages shall not in any way limit the responsibility of the individual for the consequences of his/her actions.
7. Gambling on the college campus.
8. Theft from, misuse of or damage to College property; theft of or damage to property of a member of the College community or a campus visitor, whether on College premises or at a College function. Unauthorized entry upon the property of the College, including entry after closing hours, unauthorized use of a key or entry into a restricted area, is forbidden.
9. Mental or physical abuse (hazing) of any person on College premises, or at College sponsored or supervised functions; conduct which threatens or endangers the health or safety of any such persons.
10. Forgery, alteration or misuse of College documents, records or instruments of identification with intent to deceive.
11. Intentional obstruction or disruption of teaching, research, administration, disciplinary proceedings or other College activities, including public service functions and other duly authorized activities on College premises.

12. Occupation or seizure in any manner of College property, a College facility or any portion thereof for a use inconsistent with prescribed, customary or authorized use; preventing, obstructing or substantially interfering with the use of a facility or a portion thereof by those persons to whom the space is assigned.
13. Participating in or conducting an assembly, demonstration or gathering in a manner which threatens or causes injury to persons or property; which interferes with free access of College facilities; which is harmful, obstructive or disruptive to the educational process or institutional functions of the College; or remaining at the scene of such an assembly after being asked to leave by a representative of Student Services, the Business Office, Educational Programs Office, or the President's Office.
14. Possession or use of a firearm, incendiary device or explosive, except in connection with a College approved activity. This also includes unauthorized use of any instrument designed to inflict serious bodily injury to any person.
15. Setting off a fire alarm or using or tampering with any fire- safety equipment, except with reasonable belief in the need for such alarm or equipment.
16. Failure to comply with instructions of College officials acting in performance of their duties.
17. McDowell Technical Community College is a tobacco-free campus. We no longer have designated smoking areas and smoking is not permitted on campus. Students who violate this policy will receive a verbal warning by College staff for their first offense. Continued use of tobacco products after this warning is considered a violation of this policy and appropriate disciplinary action will be taken.
18. The presence of animals on campus is forbidden, except in the case of certified service animals.
19. Violation of a local, state or federal criminal law on College premises which adversely affects the College community's pursuit of its proper educational purposes.

### ***Levels of Discipline and Appeal: Policy and Procedure***

Members of the instructional staff of the College are empowered to impose upon students those sanctions within his or her jurisdiction or to recommend to appropriate administrators sanctions of a greater nature. The following disciplinary actions are authorized for use by faculty and administrators of the College:

1. Oral warning.
2. Written warning.
3. Restriction, in writing, specifying the deprivation of privilege or other terms of restriction.
4. Disciplinary probation, the conditions of which are expressed in writing, with an acknowledgment of notice signed by the individual placed on probation.
5. Oral suspension and immediate exclusion from specific institution facilities or from all institution facilities for a period not to exceed three school days unless superseded by suspension with written notice stating cause.
6. Suspension with written notice stating cause and specifying any conditions or terms of the suspension. Suspension with written notice shall be exercised only by the President, or in his absence, by his designated representative. The length of suspension will be identified in any written notice provided to the student.
7. Expulsion or dismissal for cause. This disciplinary action shall be taken only with approval of the Board of Trustees by formal resolution of motion adopted. Prior thereto, the individual shall be in a status of suspension with written notice stating cause. The Board of Trustees shall notify the individual, who shall be offered a full and fair hearing before the Board of Trustees or an impartial panel constituting a quorum of the Board, and shall have the right to be represented by counsel for defense, to bring witnesses for his defense, to confront, examine and cross-examine the witnesses against him, and to be provided at least five days before such hearing with a detailed statement of the charges against him and copies of documents which may be presented as evidence against him. A record of hearing proceedings shall be kept.

### ***Student Records: Confidentiality and Release***

McDowell Technical Community College recognizes the importance of exercising responsibility in the maintenance and security of all student records. In order to meet that responsibility and the requirements of the Family Education Rights and Privacy Act of 1974, as enacted by Congress, the College makes the following information known:

- I. Types of educational records and information which directly relate to students and which are maintained by the College, such as:
  - A. Permanent Student Files: Transcripts of work at other institutions, health forms or records, recommendation letters, placement test profiles, application and residency forms.
  - B. Transcripts: Academic record of all courses taken while enrolled at the College.
  - C. Student Financial Aid Records.

- II. The official responsible for the maintenance of each type of record, the persons who have access to those records and the purpose for which they have access:
- A. The VP for Learning and Student Services is the individual responsible for the maintenance of student files and transcripts.
  - B. The permanent clerical staff in the Student Services Office have access to the files for maintenance purposes.
  - C. The Student Services counselors have access to the files for the purpose of academic advisement.
  - D. Other authorized College personnel have access whenever the nature of their responsibility requires access to student records or information contained therein.
  - E. Only Financial Aid Staff may access student financial aid records.
- III. The policy of the College for reviewing, maintaining, transcribing and expunging records:
- A. As a matter of policy, the institution destroys all student records except the official transcript five (5) years after the student leaves the College.
  - B. Parents and legal guardians of independent students 18 years of age or older do not have the right to view student records, grades, test scores, etc. unless written consent of the student is received. Parents of dependent students as defined in section 152 of the Internal Revenue Code of 1954 may review student records without the written consent of the student.
  - C. Requests for student transcripts will be honored for students with no outstanding debt to the College.
  - D. Student's records and/or official transcript will be forwarded only upon the written request of the student.
  - E. Whenever it is requested that grades or records of students be released to faculty or to any agency, written permission must be obtained from the student except as outlined in II preceding. Forms are available in the Student Services Office for this purpose.
  - F. Unless otherwise requested by the student, instructors may post final exam and end of course grades provided a numerical code is used.
- IV. The procedures established by the College providing access to student records:
- A. Upon receipt of a written request from the student, the VP for Learning and Student Services shall within 45 days:
    - 1. Allow the student to inspect and review the permanent file and transcript.
    - 2. Provide the student with copies of the material, if the student so desires.
    - 3. Interpret the records to the student.
    - 4. Allow the student to challenge, in writing, the content of the files. Upon receipt of the challenge, the VP for Learning and Student Services shall conduct a hearing at which time any materials found to be inappropriate or misleading will be corrected. Students shall also have the opportunity to insert into their files any written explanations they deem appropriate.
  - B. McDowell Technical Community College considers the following "Directory Information," and will release such information unless the student notifies the VP for Learning and Student Services in writing during the first three class days of each semester:
    - 1. Name.
    - 2. Program of study.
    - 3. Dates of attendance.
    - 4. Degrees and awards received.

# *Student Activities*

## ***Student Government Association***

On February 5, 1981, the Board of Trustees of McDowell Technical Community College approved granting the existing Student Advisory Council full status as a Student Government Association. The duties and responsibilities of the SGA are to serve in an advisory capacity to the President, Administration and Faculty on matters pertaining to student interest and welfare. Participation in SGA is an important way for students to have input into decision-making at the college. The MTCC Student Government Association actively participates in and supports the state student government organization known as N4CSGA. The academic, educational, career and social needs and concerns of the students at MTCC are addressed and given due consideration through this association both at the local level and state level. The president of the SGA serves as an ex-officio member of the Board of Trustees of MTCC.

Any curriculum student who is attending at least half-time and has at least a 2.5 GPA is eligible to be a voting member of the SGA. Non-SGA members who wish to have input into college decisions or address issues which are of concern to themselves or others should contact an SGA member or the SGA Advisor to express those concerns. To request a time to speak before members of the Student Government Association, a student should contact the SGA advisor or an SGA officer to schedule time on the SGA meeting agenda. The SGA advisor can provide additional information about how to become an SGA member, more complete information about SGA activities, or a list of SGA members and officers. The staff member from Student Services who is designated as SGA advisor acts only to guide and represent staff and administrative viewpoints.

The Student Government Association sponsors various events, including Spring Fling, Summer Splash and Fall Festival. All curriculum students are invited to participate free of charge; these activities are paid for through student activity fees at the beginning of each semester. Students may bring a guest to these events for a nominal charge. This charge covers food for the event.

Occasionally, the Student Government Association will sponsor dances or other events. Announcements of these events will be posted or presented in class. A nominal fee may be charged for guests at these events.

Students who wish to form a new club or organization on campus must seek official recognition through the Student Government Association.

## ***Phi Theta Kappa National Honor Society-Beta Zeta Lambda Chapter***

A chapter of the Phi Theta Kappa Honor Society was organized at McDowell Tech in 1998. The purpose of Phi Theta Kappa is to recognize and encourage scholarship among associate degree students. To achieve this purpose, Phi Theta Kappa provides opportunities for the development of leadership and service, for an intellectual climate to exchange ideas and ideals, for lively fellowship for scholars, and for stimulation of interest in continuing academic excellence. The Society is recognized by the American Association of Community Colleges as the official general honor society for two-year colleges.

Once yearly, the Beta Zeta Lambda chapter may extend an invitation to MTCC students who have been recommended by their advisors and have completed at least 12 credit hours of course work required for an associate degree and who have a GPA of 3.5 or higher.

## ***National Technical Honor Society***

McDowell Technical Community College faculty and staff organized a chapter of the National Technical Honor Society during the 2000-2001 academic year. NTHS, as it is abbreviated, began in 1984 to reward excellence in workforce education. It is an internationally recognized and proven program with over 1,500 member schools and colleges. Student membership in NTHS is available to those who seek to uphold critical workplace values and high levels of achievement. Once yearly, NTHS may extend an invitation to MTCC students who have completed at least 9 credit hours of course work required for their program of study, have achieved a GPA of at least 3.25, and have been recommended by their faculty advisor.

## ***Student Publications***

McDowell Technical Community College recognizes the value of providing opportunities for students and faculty to engage in journalistic endeavors. Under the auspices of the MTCC administration and Student Government Association, manuals, newspapers and other periodicals may be published as sufficient student interest develops.

## ***Academic Excellence Award***

McDowell Technical Community College participates with the North Carolina Community College System in selecting an Academic Excellence Award recipient. Each college is asked to select one recipient. The following are recommended criteria for student selection, consistent with Phi Theta Kappa Honor Society criteria:

- Must be currently enrolled.
- Must have completed at least 12 semester hours in an associate degree program .
- Must have a cumulative grade point average of not less than 3.25.

***North Carolina Community College Student Leadership Institute***

McDowell Technical Community College participates in Student Leadership Institute. Outstanding students are nominated by faculty/staff members.

***McDowell Technical Community College Food Pantry***

“Feeding those in need, one bag at a time.”

Located in the Student Enrichment Center.

Hours: Monday-Thursday, 9 am to 4 pm; and Friday, 9 am to 1 pm.

Student ID required.

For more information, contact the Director of Enrollment Management at 828-652-0631.



# *Continuing Education and Workforce Development*

McDowell Technical Community College, through the Department of Continuing Education, offers life-long learning opportunities to any adult, regardless of his/her educational background. A wide variety of programs are offered to provide opportunities for individuals to develop to their fullest potential whatever vocational, intellectual or cultural talents they wish.

Courses are designed to provide educational opportunities to prepare individuals for entry into an occupation, to retrain or upgrade the skills of those who are already employed, or to provide cultural and general interest courses for self-improvement. These non-curriculum classes may vary in length.

Continuing Education courses may be organized on or off campus, day or night, based upon the interest shown by the community, the availability of competent instructors, and the limitations of available equipment, space, and funds.

## ***Admission Requirements***

In general, all Continuing Education courses are open for enrollment to persons 16 years of age or older. However, because some specialty and advanced courses may be more difficult and require a greater degree of preparation, potential enrollees should be aware of the nature of the course requirements to determine their possible success in those courses. In certain specialized courses, ie:

- Advanced Technology Training
- Apprenticeship Training
- Fire Services Training
- Law Enforcement Training
- Management Development Training
- New & Expanding Industrial Training

potential students must be employed by or recommended by one of the requesting training agencies.

## ***Course Descriptions/Schedules***

Specific course descriptions are provided in course schedules or may be furnished upon request. A course schedule is published each semester. Courses are displayed via McDowell Tech's website and courses may be advertised in local newspapers or on local radio stations.

## ***Registration and Fees***

Individuals who wish to register for Continuing Education courses can register online at [www.mcdowelltech.edu](http://www.mcdowelltech.edu) or in person at McDowell Technical Community College. Registration fees for occupational, practical skills, vocational, and academic courses range from \$70-\$180.00 per course, depending upon the course length. Self-supporting class fees will vary depending upon the course. Registration fees for community service classes range from \$15-\$180.00 per course, depending on course length.

Registration fees for Continuing Education courses are set by the N.C. Legislature, and are subject to change. Fees are non-refundable, except when the class fails to materialize. An extra charge may be necessary in some courses for books, materials, and class supplies. Books and supplies may be purchased in the College Bookstore.

## ***Class Locations***

A number of Continuing Education classes are held on campus. Classes are conducted throughout McDowell County wherever a suitable meeting place can be arranged. Classes are organized in any community whenever a sufficient number of prospective class members indicate an interest.

## ***Attendance***

Typically, a minimum enrollment of 8 persons is needed to conduct a class. Students are expected to attend class regularly. Insufficient enrollment may result in cancellation of the class.

## ***Certificates***

College credit is not granted for completion of courses in Continuing Education. However, certificates are awarded to

students who successfully complete course requirements in classes which carry CEU credits. Licenses, diplomas, or other forms of recognition are awarded by certain agencies outside the College upon successful completion of specially designed courses. Certificates will not be released to students who have any outstanding debts to the college.

***Continuing Education Units (CEU)***

The Continuing Education Department will award Continuing Education Units (CEU's) for the successful completion of appropriate courses. The CEU was designed to recognize and record individual and institutional participation in non-traditional studies and special activities. The CEU is a recognized recording method for substantive non-credit learning experiences. A CEU is defined as "10 hours of participation in an organized Continuing Education experience under responsible sponsorship and qualified instruction or direction."

# *Programs Offered in Continuing Education and Workforce Development*

## ***General Adult and Community Services***

The College is always concerned with identifying community potentials and community needs, drawing together resources at the College and other agencies to create new educational opportunities. Programs afford the opportunity for individuals to gain personal satisfaction through self-advancement. This includes opportunities to grow intellectually, to develop creative skills or talent, to learn hobby or leisure time activities, and to gain civic and cultural awareness. The general types of programs offered are:

Academic Courses	Consumer Education
Personal Business Education	Health and Safety Education
Citizenship Development Courses	Language Arts Education
Homemaking Education	Creative Arts Education
Family Life Programs	Music/Dance Education

## ***Occupational and Continuing Education Programs***

The college offers a number of Occupational and Continuing Education Services, including Teleconference Workshops, Computer Training, and a variety of specialized programs designed to enhance an individual's employability, to help him or her learn a new career, to establish a pattern of growth and stability in business and industry, and to help individuals stay abreast of trends in their chosen field. These programs may be subdivided as follows:

### ***Small Business Center***

McDowell Technical Community College's Small Business Center (SBC) began operations on September 6, 1988. The center was established to provide McDowell County with its first comprehensive small business development and assistance program.

The mission of the SBC is to train, counsel, develop and provide needed services for small businesses and their owners. As part of its provision of services, the SBC will attempt:

- To operate as an information service on small business issues and concerns.
- To coordinate the referral of small business owners/managers to acquire legal sources for in-depth assistance, counseling and financial assistance.
- To assist in the preparation of business plans, loan packages and research projects related to small business growth and operation.
- To provide limited tax and accounting services for sole proprietorship and partnership businesses.
- To seek out information and assist in loan package preparation involving Federal and State financing programs for small business owners.
- To deliver one-on-one business counseling.
- To assist small business owners with marketing and management problems.
- To offer seminars/workshops on timely topics of interest to the small business owner.
- To offer a resource library of books and videos to be checked out by clients at no charge.

### ***Customized Training Program***

The Customized Training Program supports the economic efforts of the State by providing education and training opportunities for eligible businesses and industries. Amended in 2008, this program combines the New and Expanding Industry Training Program and the Customized Industry Training Program to more effectively respond to business and industry. The Customized Industry Training Program also includes the former Focused Industry Training Program and shall offer programs and training services to assist new and existing business and industry to remain productive, profitable, and within the State.

The purpose of the Customized Training Program is to provide customized training assistance in support of full-

time production and direct customer service positions created in the State of North Carolina, thereby enhancing the growth potential of companies located in the state while simultaneously preparing North Carolina's workforce with the skills essential to successful employment in emerging industries.

### ***Occupational Industry Training***

McDowell Technical Community College conducts in-plant courses to assist manufacturing, service and/or governmental organizations with in-service training of their employees. In-plant training is defined as an occupational extension course that meets the following conditions:

- 1) Training shall occur in the facilities or at the sites in which the organization normally operates.
- 2) Enrollment shall be limited to the employees of the organization in which the training occurs; trainees may be newly-hired employees who need entry level skills or existing employees who, due to documented changes in job content, need up-grading or retraining.
- 3) Training may partially be conducted at the employee's assigned work station during normal working hours.
- 4) Training shall be directly related to job skills.

Examples of types of training offered to industry include: Statistical Process Control, Total Quality Management, Industrial Sewing, Weaving, Mold Line Training, Forklift Licensure, Blueprint Reading, Measuring Instruments, Metric System, Mathematics, Hydraulics and Pneumatics, Maintenance Mechanics, Industrial Safety, Fire Brigade Training, Upholstery, Technical Writing, Communication Skills, Furniture Making, Furniture Framing, Fixer Training, etc.

Companies officials who desire this type of training for their employees should contact MTCC for more information.

### ***Management Development Training***

MTCC offers several different training options concerning Management Development. The college has certified instructors available in areas such as: McGraw-Hill Supervision Training, Zenger Miller Management Training, Deming Quality Control Training and the latest innovations in Total Quality Management.

### ***Emergency Services Training***

#### **Fire Service Training**

MTCC provides a wide range of fire training opportunities to meet the continuing education training needs of area firefighters. The College offers all course and training requirements to obtain Firefighter Certification, Instructor Certification, Hazardous Material Awareness Level and Hazardous Material Operational Level. The College also holds an Annual Fire, Rescue and EMS College. In total, the College offers over 150 courses annually in virtually every area of Fire Training.

#### **Rescue Training**

MTCC provides a wide range of training opportunities to meet the continuing education training requirements of Rescue Personnel. The college offers Technical Rescue (TR) Certification for area rescue personnel. The Annual Fire and Rescue College also provides courses in areas such as Vehicle Extrication, Search Procedures, Man-Tracking, Hazardous Materials, etc.

#### **Emergency Medical Services Training**

MTCC provides a wide range of training opportunities to meet the needs of area Emergency Medical Personnel. The college provides continuing education training as well as inservice training opportunities weekly to meet local need. Advanced training opportunities are also offered including: Basic Cardiac Life Support, Advanced Cardiac Life Support, Pediatric Advanced Life Support, and Vehicle Operator Training. The College offers the following levels of Emergency Services Training: EMT Basic, Advanced EMT and Paramedic. In addition to these programs, the college offers over 100 courses annually in the areas of CPR Certification, First Aid Certification, CPR Recertification and Communicable Disease Training to help local government and industry leaders meet OSHA requirements.

#### **Law Enforcement Training**

MTCC provides a number of training opportunities to local Law Enforcement personnel. Training classes are provided to city, county and Department of Corrections officers to meet continuing education needs. The college currently offers training opportunities in the following areas: Firearms Recertification, Breathalyzer Training, Unarmed

Self-Defense Training, Basic Law Enforcement Training (see Curriculum Program description) and Specialized Training.

## ***College and Career Readiness (CCR) Programs***

College and Career Readiness programs are provided for students with low basic education skills in writing, reading, math, computer literacy, and communication. Students who receive these services include low-skilled adults, individuals with disabilities, youth, justice-involved individuals, and English language acquisition students. Goals may include completing adult high school, or obtaining a high school diploma or its recognized equivalent, and/or earning employment related credentials necessary for post-secondary education or employment success. Coursework is based on The NCCCS College and Career Readiness Standards for Adult Education by the Office of Career, Technical, and Adult Education (OCTAE).

Transitions programs and services using adult education career pathways and other platforms are also provided, and are aligned with adult education content standards, postsecondary education completion goals, college entry readiness, life skills, and employment instruction and training. They include academic instruction, non-academic services, and support for students to ensure student success and transition to postsecondary career and employment options. Transitions programs may also include integrating career awareness, bridge instruction, integrated education training, transitions academies, and computer skills. Current career occupation pathways, based on projected Region C Workforce Development employment trends, include: Advanced Manufacturing, Health Sciences, and other pathways such as, Nursing Assistant, Early Childhood Education, Computer Information Technology, Welding Technology; and others.

A student may register at any scheduled orientation held at NCWorks, Marion throughout the semester and attend the class that is most convenient to their schedule. Classes are offered year-round. CCR classes are open to any adults age 18 or over who can benefit from class content, regardless of status. Students as young as 16 who are not enrolled in a public, private or home school may also enroll with notarized documentation from parents and public/private/home school officials.

All classes are fee-waived and texts are provided for in-class use in the following CCR programs:

### ***Adult Basic Education (ABE)***

Adult Basic Education is a program of instruction designed for adults who function below the high school level. Many of these adults have intellectual disabilities or similar barriers to independence. These classes work to assist adult learners with improving their academic, workplace, and independent living skills. Instruction is offered in reading, writing, math, English, science and career exploration with a focus on college and career readiness skills.

### ***Adult Secondary Education (ASE)***

Adult Secondary Education is a program of instruction (9.0 grade level and above or the equivalent) designed to prepare adults for further education or transition toward skill attainment and employment. Adult Secondary Education includes the Adult High School (AHS) Diploma program and the High School Equivalency (HSE) Diploma program.

#### **Adult High School (AHS)**

The Adult High School program is intended to assist adults in earning the remaining credits they need to receive a high school diploma. The Adult High School Diploma program consists of classroom instruction, learning laboratory courses, distance education, or a combination of instructional methods which deliver the course objectives required to earn an Adult High School Diploma. The AHS Diploma Program is offered cooperatively with the local public school system to help adults earn an Adult High School Diploma. Diplomas are issued cooperatively by the community college and the local public school system. Official transcripts are maintained and issued by MTCC.

Required Credits - Colleges must offer at least the minimum number of credits required for graduation by the North Carolina Department of Public Instruction. Link- <http://www.dpi.state.nc.us/docs/curriculum/home/graduation-requirements>. Electives are selected from a variety of program offerings and structured so that students develop a range of skills which qualify them to succeed in the labor market or to enter technical, vocational, or college transfer programs. There is no cost to students for courses. However, a minimal graduation fee may be required.

#### **High School Equivalency (HSE)**

The High School Equivalency Diploma program offers instruction to assist learners in preparing to successfully pass a designated high school equivalency test. This test is designed to document knowledge and skills equivalent



to that of a graduating high school senior. Students who successfully complete one of the approved test batteries earn the North Carolina High School Equivalency Diploma, allowing them to enter college, pursue further training or obtain employment.

### ***Basic Skills Plus***

Basic Skills Plus (BSP) is a program within CCR that offers transition and career pathway support to students preparing for entry into employment and post-secondary education programs. BSP students work to earn entry level employment and occupational credentials.

To be eligible for BSP, students **must be** co-enrolled in curriculum or workforce continuing education while earning their adult high school diploma. The high school diploma may be obtained in Adult High School (AHS) or High School Equivalency (HSE) classes.

Tuition for the curriculum or workforce continuing education classes **may be waived** for eligible students. Basic Skills Plus students may earn up to 96 hours in workforce continuing education program(s) or 18 hours in curriculum program(s) while part of BSP. Eligible students must apply for the Basic Skills Plus program and be approved by the Director of CCR.

### ***English Language Acquisition (ELA)***

English Language Acquisition classes are designed for students to improve their English speaking, reading and writing skills, as well as everyday life skills. Students will have an opportunity to practice basic conversation, improve interpersonal skills, and become a more involved member of the community. In addition, citizenship classes are available upon request.

#### **Integrated English literacy and Civics Education (IEL/CE)**

Integrated English literacy and civics are education services provided to adults whose first language is not English, including professionals with degrees and credentials in their native countries, to enable them to achieve competency in the English language and acquire the basic and more advanced skills needed to function effectively as parents, workers, and citizens in the United States. Services include instruction in literacy, math, and English language acquisition and instruction on the rights and responsibilities of citizenship and civic participation, and may include workforce training. Students may register at any ELA class.

All classes are offered at a variety of times and locations. For more information or to sign-up, contact College and Career Readiness at 828-659-6001, ext. 137.

## ***Human Resources Development (HRD)***

The purpose of the Human Resources Development program is to educate and train individuals for success in the workplace. HRD courses provide skills training and assistance for adults who are trying to find employment, get back into the workforce or working to find their place in today's job market. The HRD program provides employability skills training (and more) and focuses on the unemployed and underemployed but is not limited to this group of people. These groups of people may include the following: unemployed insurance claimants, NCWorks customers, public assistance recipients, dislocated workers, out-of-school youth, justice-involved individuals, probationers, and individuals in career/job transition.

All classes in the HRD program are offered at no cost to unemployed individuals seeking employment and underemployed individuals who are working and meet special income guidelines. For individuals not in either of the categories, occupational extension fees will apply.

Classes are offered at the NCWorks Career Center, and are scheduled on a continuous basis throughout the year to meet the needs of the students who enroll. For more information, call the HRD office at 659-6001, ext. 140.

### **HRD Basic Technology Literacy**

Make the transition into technology training easy by gaining an awareness of the role of technology in the workplace. Develop basic computer use skills, compile employment-related documents, research careers, and understand the impact of digital literacy and social networking on employment.

### **HRD BEST (Better Employability Skills thru Training)**

Gain valuable information and skills that will make you a valuable employee. These skills will be transferrable to any workplace. Topics such as teamwork, employer expectations, communication skills and others will be covered. The course is a four-week course. Each week is unique so the student may start at the beginning of each week and after all four weeks are

completed a BEST certificate will be awarded. (Note: This is a unique program to MTCC.)

#### **HRD Career Planning and Assessment**

Explore your natural skills, search for the ideal career, and get in touch with the resources to reach your goals. Learn the career pathways with high projected employment needs in our workforce area.

#### **HRD Career Readiness Certificate (CRC) Prep**

Earn a North Carolina Career Readiness Certificate based on the ACT WorkKeys system. It is a portable credential recognized nationally, that shows employers your skill level in Applied Math, Workplace Documents, and Graphic Literacy. Prove to employers you have the skills to do the job by earning a bronze, silver, gold or platinum certificate.

#### **HRD Employability Keyboarding**

Gain basic knowledge of the keyboard to facilitate transitions into advanced keyboarding, introductory computer or office technology classes. Explore careers and understand the importance of keyboarding/data entry skills in employment.

#### **HRD Financial Literacy**

Gain the basic skills of finances. Learn how to write checks, how to open and balance a checking or savings account, how to track your spending, how to discern between want and needs, how to budget, and how to build credit.

#### **HRD Job Fair Bootcamp**

Prepare for a job fair by gaining valuable insight on what employers are looking for. Assistance with creating an up-to-date resume as well as building interview skills will be discussed in this class. Classes are offered as needed.

#### **HRD Resume/Interviewing/Internet Job Search**

Professionally prepare for the job you want! Utilize resume development techniques to complete a professional resume; prepare for your interview; become familiar with application procedures; and do Internet job searches to assist you in locating and obtaining employment.

#### **HRD Success By Choice-Motivation and Retention**

Develop a healthy self-esteem and positive attitude to enhance personal and career success. Learn self-management skills, personal branding, and emotional intelligence skills. Establish goals and explore career opportunities.

#### **HRD Tech Academy**

Complete career and personality assessments, and match career exploration with current skills, experience and interests for success in a specific career path. Research career opportunities, wages, and regional employment growth. Utilize goal setting and achievement by developing a written plan of action for success in a chosen career path. Learn how to create a resume and cover letter, basic computer skills, social media resources, economic literacy, and successful interviewing skills.

#### **HRD Working Smart**

Learn employer expectations of self-management on the job, work ethics, communication skills, problem solving, and conflict management.

# **NCWorks Career Center at The Ford Miller Employment and Training Center**

## **Career Planning, Training & Placement Services**

### **SERVICES**

#### **-Adult High School (AHS) Diploma**

- Career Assessment/Testing
- Career Counseling
- Career Exploration/Research
- Career /Job Related Fax & Copy Services
- Career Pathway Certificate/Diploma Courses
- **Career Readiness Certificate (CRC)**
- Computer Software Tutorials
- Education & Training Information
- English Language Acquisition (ELA)

#### **- High School Equivalency (HSE) Diploma**

- Internet Job Search
- Interview/Job Search Preparation
- Job Listings/Job Referrals
- Labor Market Information
- Needs & Service Referral
- Resume Preparation
- WorkKeys®Preparation
- WorkKeys®Testing

### **SHORT-TERM JOB READINESS CLASSES**

*Classes are offered at no cost if you are unemployed, have been notified of a layoff, or are working and meet special income guidelines.*

Industry Pre-Hire or Re-Hire Training  
Internet Job Search/ NCWorks Orientation  
Resume & Interviewing

Computer Literacy  
TECH Academy  
Financial Literacy

### **PARTNERING AGENCIES**

- Division of Workforce Solutions
- McDowell Technical Community College
- Workforce Innovations & Opportunity Act (WIOA Adult and Youth Program)
- McDowell County Dept. of Social Services (DSS)
- Vocation Rehabilitation (VR)
- Community Action Opportunities (Life Works)
- McDowell Access To Care & Health (Match Program)
- Senior Community Service Employment Program (Title V)

### **LOCATION & HOURS**

**NCWorks Career Center at  
The Ford Miller Employment and Training Center  
316 Baldwin Avenue, Suite 2, Marion, NC 28752  
Phone: 828-659-6001 / Fax: 828-659-8733  
Monday – Thursday \* 8:30 am—5:00 pm  
Friday \* 8:30 am—12 noon**

**NC Works Career Center at  
The Ford Miller Employment and Training Center**

# Technical and Vocational Programs

Please refer to the following lists when selecting electives in Humanities/Fine Arts and Social/Behavioral Sciences in all academic programs except College Transfer and General Education.

## *Humanities/Fine Arts*

Select one of the following:

ART	111	Art Appreciation	3	0	3	
DRA	111	Theatre Appreciation	3	0	3	
DRA	126	Storytelling	3	0	3	
HUM	110	Technology and Society	3	0	3	
HUM	115	Critical Thinking	3	0	3	
HUM	122	Southern Culture		2	2	3
MUS	110	Music Appreciation	3	0	3	
MUS	210	History of Rock Music	3	0	3	
PHI	210	History of Philosophy	3	0	3	
REL	110	World Religion	3	0	3	
REL	211	Intro to Old Testament	3	0	3	
REL	212	Intro to New Testament	3	0	3	

## *Social/Behavioral Science*

Select one of the following:

ECO	251	Principles of Microeconomics	3	0	3	
ECO	252	Principles of Macroeconomics	3	0	3	
HIS	131	American History I	3	0	3	
HIS	132	American History II	3	0	3	
POL	120	American Government	3	0	3	
POL	130	State and Local Government	3	0	3	
PSY	150	General Psychology	3	0	3	
SOC	210	Introduction to Sociology		3	0	3
SOC	213	Sociology of the Family	3	0	3	
SOC	220	Social Problems	3	0	3	

# Academic Programs

## Accounting and Finance

### Concentration: Accounting

A25800A (Associate Degree) C25800A, C25800B, C25800C, C25800D (Certificates)

The Accounting and Finance curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting and finance profession. Accountants and finance professionals assemble and analyze, process, and communicate essential information about financial operations. Course work may include accounting, finance, ethics, business law, computer applications, financial planning, insurance, marketing, real estate, selling, and taxation. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics. Graduates should qualify for entry-level accounting and finance positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title		Class/Lab/Credit			
<b>I.</b>	<b>General Education Courses</b>				
	COM-231 Public Speaking	3	0	3	
	ENG-111 Writing and Inquiry	3	0	3	
	MAT-143 Quantitative Literacy	2	2	3	
	Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76				
<b>II.</b>	<b>Major Courses</b>				
<b>A.</b>	<b>Core Courses</b>				
	ACC-120 Principles of Financial Accounting	3	2	4	
	ACC-121 Principles of Managerial Accounting		3	2	4
	BUS-115Business Law	3	0	3	
	BUS-225Business Finance	3	0	3	
	CIS-110 Introduction to Computers		2	2	3
	CTS-130Spreadsheet	2	2	3	
	ECO-252 Principles of Macroeconomics	3	0	3	
<b>III.</b>	<b>Concentration</b>				
	ACC-129 Individual Income Tax	2	2	3	
	ACC-140 Payroll Accounting	1	2	2	
	ACC-220 Intermediate Accounting I	3	2	4	
<b>IV.</b>	<b>Other Major Courses</b>				
	<b>Take 8 credits from:</b>				
	ACC-130 Business Income Taxes	2	2	3	
	ACC-150 Accounting Software Applications	1	2	2	
	ACC-180 Practices in Bookkeeping	3	0	3	
	ACC-220 Intermediate Accounting I	3	2	4	
	<b>Take 9 credits from:</b>				
	ACC-221 Intermediate Accounting II		3	2	4
	BUS-110Introduction to Business	3	0	3	
	BUS-137Principles of Management	3	0	3	
	OST-122Office Computations	2	2	3	
	OST-136Word Processing	2	2	3	
	OST-153Office Finance Solutions	2	2	3	
	OST-286Professional Development	3	0	3	



	BAF-111	Teller Training	3	0	3	
<b>V.</b>	<b>Other Required Courses</b>					
	ACC-227	Practices in Accounting	3	0	3	
	ACA-115	Success and Study Skills	0	2	1	

**Total Credits: 68**

### *Recommended Semester Schedule*

#### **First Year Fall**

	ACA-115	Success and Study Skills	0	2	1	
	ACC-120	Principles of Financial Accounting	3	2	4	
	BUS-110	Introduction to Business	3	0	3	
	CIS-110	Introduction to Computers		2	2	3
	OST-122	Office Computations	2	2	3	

#### **First Year Spring**

	ACC-121	Principles of Managerial Accounting		3	2	4
	ACC-180	Practices in Bookkeeping	3	0	3	
	BUS-115	Business Law	3	0	3	
	CTS-130	Spreadsheet	2	2	3	

#### **First Year Summer**

	MAT-143	Quantitative Literacy	2	2	3	
		Humanities Elective	3	0	3	

#### **Second Year Fall**

	ACC-220	Intermediate Accounting I	3	2	4	
	ACC-129	Individual Income Tax	2	2	3	
	OST-136	Word Processing	2	2	3	
	BUS-225	Business Finance	3	0	3	
		Social Science Elective	3	0	3	

#### **Second Year Spring**

	ACC-150	Accounting Software Applications	1	3	2	
	ECO-252	Principles of Macroeconomics	3	0	3	
	OST-153	Office Finance Solutions	2	2	3	
	ACC-140	Payroll Accounting	1	3	2	
	ENG-111	Writing and Inquiry	3	0	3	

#### **Second Year Summer**

	ACC-227	Practices in Accounting	3	0	3	
	COM-231	Public Speaking	3	0	3	

### *Accounting Certificate Program (C25800A)*

Title		Class/Lab/Credit			
I.	Major Courses				
	ACC-120	Principles of Financial Accounting	3	2	4
	ACC-121	Principles of Managerial Accounting		3	2
	CIS-110	Introduction to Computers		2	2
II.	Other Major Courses				
	BUS-110	Introduction to Business	3	0	3

**Total Credits: 14**

### *Recommended Semester Schedule*

#### **First Year Fall**

	ACC-120	Principles of Accounting	3	2	4
	CIS-110	Introduction to Computers		2	2
3	BUS-110	Introduction to Business	3	0	3

#### **First Year Spring**

4	ACC-121	Principles of Managerial Accounting		3	2
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### *Accounts Payable, Accounts Receivable, Bookkeeping Certificate Program (C25800B)*

Title	Class/Lab/Credit				
<b>I. Major Courses</b>					
ACC-120	Principles of Financial Accounting	3	2	4	
ACC-121	Principles of Managerial Accounting		3	2	4
CIS-110	Introduction to Computers		2	2	3
<b>II. Other Major Courses</b>					
ACC-180	Practices in Bookkeeping	3	0	3	
OST-153	Office of Finance Solutions	2	2	3	

**Total Credits: 17**

### *Recommended Semester Schedule*

#### **First Year Fall**

	ACC-120	Principles of Accounting	3	2	4
	CIS-110	Introduction to Computers		2	2
					3

#### **First Year Spring**

	ACC-121	Principles of Managerial Accounting		3	2
	ACC-180	Practices in Bookkeeping		3	0
	OST-153	Office Finance Solutions	2	2	3

### *Income Tax Preparer Certificate Program (C25800C)*

Title	Class/Lab/Credit				
<b>I. Major Courses</b>					
ACC-120	Principles of Financial Accounting	3	2	4	
ACC-121	Principles of Managerial Accounting		3	2	4
ACC-129	Individual Income Tax	2	2	3	
<b>II. Other Major Courses</b>					
ACC-130	Business Income Taxes	2	2	3	
BUS-110	Introduction to Business	3	0	3	

**Total Credits: 17**

***Recommended Semester Schedule***

**First Year Fall**

ACC-120	Principles of Accounting	3	2	4	
ACC-129	Individual Income Tax	2	2	3	
BUS-110	Introduction to Business	3	0	3	

**First Year Spring**

ACC-121	Principles of Managerial Accounting		3	2	4
ACC-130	Business Income Taxes	2	2	3	

***Payroll Accounting Clerk Certificate Program (C25800D)***

Title		Class/Lab/Credit			
<b>I.</b>	<b>Major Courses</b>				
	ACC-120 Principles of Financial Accounting	3	2	4	
	ACC-121 Principles of Managerial Accounting		3	2	4
	ACC-140 Payroll Accounting	1	3	2	
	CIS-110 Introduction to Computers		2	2	3
<b>II.</b>	<b>Other Major Courses</b>				
	OST-153 Office Finance Solutions	2	2	3	

**Total Credits: 16**

***Recommended Semester Schedule***

**First Year Fall**

ACC-120	Principles of Accounting	3	2	4	
CIS-110	Introduction to Computers		2	2	3

**First Year Spring**

ACC-121	Principles of Managerial Accounting		3	2	4
OST-153	Office Finance Solutions	2	2	3	
ACC-140	Payroll Accounting	1	3	2	

# Accounting and Finance

## Concentration: Finance Services

A25800B (Associate Degree), C25800E (Certificate)

The Accounting and Finance curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting and finance profession. Accountants and finance professionals assemble and analyze, process, and communicate essential information about financial operations. Course work may include accounting, finance, ethics, business law, computer applications, financial planning, insurance, marketing, real estate, selling, and taxation. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics. Graduates should qualify for entry-level accounting and finance positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title		Class/Lab/Credit		
<b>I.</b>	<b>General Education Courses</b>			
	COM-231 Public Speaking	3	0	3
	ENG-111 Writing and Inquiry	3	0	3
	MAT-143 Quantitative Literacy	2	2	3
	Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76			
<b>II.</b>	<b>Major Courses</b>			
A.	Core Courses			
	ACC-120 Principles of Financial Accounting	3	2	4
	ACC-121 Principles of Managerial Accounting		3	2 4
	BUS-115Business Law	3	0	3
	BUS-225Business Finance	3	0	3
	CIS-110 Introduction to Computers		2	2 3
	CTS-130Spreadsheet	2	2	3
	ECO-252 Principles of Macroeconomics	3	0	3
<b>III.</b>	<b>Concentration</b>			
	BAF-143 Financial Planning	3	0	3
	BUS-147Business Insurance	3	0	3
	BUS-125Personal Finance	3	0	3
<b>IV.</b>	<b>Other Major Courses</b>			
	<b>Take 8 credits from:</b>			
	ACC-130 Business Income Taxes	2	2	3
	ACC-150 Accounting Software Applications	1	2	2
	ACC-180 Practices in Bookkeeping	3	0	3
	ACC-220 Intermediate Accounting I	3	2	4
	<b>Take 9 credits from:</b>			
	ACC-221 Intermediate Accounting II		3	2
4	BUS-110Introduction to Business	3	0	3
	BUS-137Principles of Management	3	0	3
	OST-122Office Computations	2	2	3
	OST-136Word Processing	2	2	3

OST-153	Office Finance Solutions	2	2	3	
OST-286	Professional Development	3	0	3	
BAF-111	Teller Training		3	0	3

**V. Other Required Courses**

ACC-227	Practices in Accounting		3	0	3
ACA-115	Success and Study Skills		0	2	1

**Total Credits: 68**

***Recommended Semester Schedule***

**First Year Fall**

ACA-115	Success and Study Skills		0	2	1
ACC-120	Principles of Financial Accounting		3	2	4
BUS-110	Introduction to Business	3	0	3	
CIS-110	Introduction to Computers			2	2
OST-122	Office Computations	2	2	3	3

**First Year Spring**

ACC-121	Principles of Managerial Accounting			3	2
BAF-111	Teller Training		3	0	3
BUS-115	Business Law	3	0	3	
CTS-130	Spreadsheet	2	2	3	

**First Year Summer**

MAT-143	Quantitative Literacy		2	2	3
Humanities Elective			3	0	3

**Second Year Fall**

ACC-220	Intermediate Accounting I		3	2	4
BAF-143	Financial Planning		3	0	3
BUS-147	Business Insurance	3	0	3	
BUS-225	Business Finance	3	0	3	
Social Science Elective			3	0	3

**Second Year Spring**

ACC-150	Accounting Software Applications		1	3	2
ECO-252	Principles of Macroeconomics		3	0	3
OST-153	Office Finance Solutions	2	2	3	
ACC-140	Payroll Accounting		1	3	2
ENG-111	Writing and Inquiry		3	0	3

**Second Year Summer**

ACC-227	Practices in Accounting		3	0	3
COM-231	Public Speaking		3	0	3

***Financial Services Certificate Program (C25800E)***

Title	Class/Lab/Credit
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**I. Major Courses**

ACC-120	Principles of Financial Accounting	3	2	4
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	ACC-121	Principles of Managerial Accounting		3	2	4
	CIS-110	Introduction to Computers		2	2	3
	BAF-143	Financial Planning	3	0	3	
<b>II.</b>	<b>Other Major Courses</b>					
	BAF-111	Teller Training		3	0	3

**Total Credits: 17**

***Recommended Semester Schedule***

**First Year Fall**

	ACC-120	Principles of Accounting	3	2	4	
	CIS-110	Introduction to Computers		2	2	3
	BAF-143	Financial Planning	3	0	3	

**First Year Spring**

	ACC-121	Principles of Managerial Accounting		3	2	4
	BAF-111	Teller Training	3	0	3	

# Advertising and Graphic Design

A30100 (Associate Degree)

D30100 (Diploma-Evening) C30100 (Certificate-Evening)

This curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Students will be trained in the development of concept and design for promotional materials such as newspaper and magazine advertisements, posters, folders, letterheads, corporate symbols, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and business with in-house graphics operations.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

*\*This curriculum was designed to be entered in the fall of each year. Some classes may not be offered every semester.*

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.					
ART	111	Art Appreciation **Recommended	3	0	3
PSY	150	General Psychology **Recommended	3	0	3
<b>II. Major Courses</b>					
<b>A. Core</b>					
Required Courses					
GRD	110	Typography I	2	2	3
GRD	280	Portfolio Design	2	4	4
Required Subject Areas					
ART	121	Two-Dimensional Design	0	6	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	131	Illustration I	1	3	2
GRD	141	Graphic Design I	2	4	4
GRD	142	Graphic Design II	2	4	4
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Techniques I	1	4	3
<b>B. Other Major Courses</b>					
<b>Take 24 credits:</b>					
ART	171	Digital Design I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
GRD	160	Photo Fundamentals I	1	4	3
GRD	241	Graphic Design III	2	4	4

GRD	242	Graphic Design IV	2	4	4
GRD	249	Advanced Design Practice	1	9	4
GRD	263	Illustrative Imaging	1	4	3

**Take 3 credits:**

WBL	111	Work-Based Learning I	0	10	1
WEB	115	Web Markup and Scripting	2	2	3
WEB	120	Intro. to Internet Multimedia	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	210	Web Design	2	2	3
WEB	214	Social Media	2	2	3

**III. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 71**

***Recommended Semester Schedule***

**First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
ART	275	Introduction to Graphic Design	0	6	3
ENG	111	Writing and Inquiry	3	0	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	141	Graphic Design I	2	4	4
GRD	151	Computer Design Basics	1	4	3

**First Year-Spring**

ART	171	Digital Design I	0	6	3
COM	231	Public Speaking	3	0	3
GRD	110	Typography	2	2	3
GRD	131	Illustration I	1	3	2
GRD	142	Graphic Design II	2	4	4

**First Year-Summer**

GRD	160	Photo Fundamentals I	1	4	3
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**Second Year-Fall**

ART	121	Two-Dimensional Design	0	6	3
GRD	241	Graphic Design III	2	4	4
GRD	263	Illustrative Imaging	1	4	3
MAT	143	Quantitative Literacy	2	2	3
Major Elective-See list of courses			3	0	3

**Second Year-Spring**

ART	111	Art Appreciation ** Recommended	3	0	3
GRD	152	Computer Design Techniques	1	4	3
GRD	242	Graphic Design IV	2	4	4
GRD	249	Advanced Design Practice	1	9	4
PSY	150	General Psychology **Recommended	3	0	3

**Second Year-Summer**

GRD	280	Portfolio Design	2	4	4
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***Diploma Program (D30100)***

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
<b>II. Major Courses</b>					
<b>Core</b>					
GRD	110	Typography I	2	2	3
GRD	280	Portfolio Design	2	4	4
<b>Required Subject Areas</b>					
ART	121	Two-Dimensional Design	0	6	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	131	Illustration I	1	3	2
GRD	141	Graphic Design I	2	4	4
GRD	142	Graphic Design II	2	4	4
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Techniques I	1	4	3
<b>III. Other Major Courses</b>					
ART	171	Digital Design I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
<b>IV. Other Required Courses</b>					
ACA	115	Success and Study Skills	0	2	1
<b>Total Credits: 41</b>					

### *Recommended Semester Schedule*

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
ART	121	Two-Dimensional Design	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
GRD	121	Drawing Fundamentals I	1	3	2
GRD	141	Graphic Design I	2	4	4
GRD	151	Computer Design Basics	1	4	3

#### **First Year-Spring**

ART	171	Digital Design I	0	6	3
GRD	110	Typography I	2	2	3
GRD	131	Illustration I	1	3	2
GRD	142	Graphic Design II	2	4	4
GRD	152	Computer Design Techniques	1	4	3

#### **First Year-Summer**

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
GRD	280	Portfolio Design	2	4	4

### *Certificate Program (C30100)*

Title			Class/Lab/Credit		
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**I. Major Courses**

ART	121	Two-Dimensional Design	0	6	3
GRD	141	Graphic Design I	2	4	4
GRD	151	Computer Design Basics	1	4	3

**II. Other Major Courses**

ART	171	Digital Design I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3

**Total Credits: 16**

***Recommended Semester Schedule*****First Year-Fall**

ART	275	Introduction to Graphic Design	0	6	3
GRD	151	Computer Design Basics	1	4	3

**First Year-Spring**

ART	171	Digital Design I	0	6	3
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**Second Year-Fall**

ART	121	Two-Dimensional Design	0	6	3
GRD	141	Graphic Design I	2	4	4

## *Air Conditioning, Heating and Refrigeration Technology*

A35100 (**Associate Degree**) D35100 (**Diploma**) C35100 (**Certificate**)

The Air Conditioning, Heating, and Refrigeration Technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the AAS degree covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. AAS degree graduates should be able to demonstrate an understanding of system selection and balance and advanced systems

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title			Class/Lab/Credit		
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76

**II. Major Core Courses**

AHR	110	Intro. to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4
AHR	114	Heat Pump Technology	2	4	4
AHR	130	HVAC Controls	2	2	3
AHR	211	Residential System Design	2	2	3
AHR	212	Advanced Comfort Systems	2	6	4
AHR	213	HVACR Building Code	1	2	2

**III. Other Major Courses**

Take 3 credits

WBL	120	Career Readiness/Explore/Employ.	2	3	3
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Take 18 credits

AHR	115	Intro. to Refrigeration	1	3	2
AHR	160	Refrigerant Certification	1	0	1
AHR	180	HVACR Customer Relations	1	0	1
BPR	135	Schematics and Diagrams	2	0	2
CIS	110	Introduction to Computers	2	2	3
EGR	125	Appl Software for Tech	1	2	2
ELC	128	Introduction to PLC	2	3	3



REF	117	Refrigeration Controls	2	6	4
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

#### **IV. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits:** 69

### ***Recommended Semester Schedule***

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
AHR	110	Intro. to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
WBL	120	Career Readiness/Explore/Employ.	2	3	3
ENG	111	Writing and Inquiry	3	0	3

#### **First Year-Spring**

AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4
AHR	130	HVAC Controls	2	2	3
ELC	128	Intro to PLC	2	3	3

#### **First Year-Summer**

AHR	114	Heat Pump Technology	2	4	4
AHR	115	Refrigeration Systems	1	3	2
AHR	211	Residential System Design	2	2	3
REF	117	Refrigeration Controls	2	6	4

#### **Second Year-Fall**

AHR	160	Refrigerant Certification	1	0	1
AHR	180	HVACR Customer Relations	1	0	1
AHR	212	Advanced Comfort Systems	2	6	4
AHR	213	HVACR Building Code	1	2	2
EGR	125	Appl Software for Tech	1	2	2
MAT	143	Quantitative Literacy	2	2	3

#### **Second Year-Spring**

BPR	135	Schematics and Diagrams	2	0	2
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CIS	110	Introduction to Computers	2	2	3
COM	231	Public Speaking	3	0	3
Elective		Humanities/Fine Arts	3	0	3
Elective		Social/Behavior Science	3	0	3

**Note:** WBL 111, 112, 113, 114, 121, 122, 123, 124, 131, 132, 133, 134, 211, 212, 213, 214 may count for any of the following:  
ELC 128, AHR 115, REF 117, AHR 160, AHR 180, EGR 125, BPR 135

### ***Diploma Program (D35100)***

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
II. Major Courses					
AHR	110	Introduction to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4
AHR	114	Heat Pump Technology	2	4	4
AHR	130	HVAC Controls	2	2	3
AHR	211	Residential System Design	2	2	3
AHR	213	HVACR Building Code	1	2	2
III. Other Major Courses					
Take 3 credits					
WBL	120	Career Readiness/Explore/Employ.	2	3	3
Take 18 credits					
AHR	160	Refrigeration Certificate	1	0	1
BPR135		Schematics and Diagrams	2	0	2
CIS	110	Introduction to Computers	2	2	3
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1
Total Credits: 44					

### ***Recommended Semester Schedule***

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
AHR	110	Introduction to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
AHR	160	Refrigeration Certification	1	0	1

#### **First Year-Spring**

AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4
AHR	130	HVAC Controls	2	2	3
BPR	135	Schematics and Diagrams	2	0	2

#### **First Year-Summer**

AHR	114	Heat Pump Technology	2	4	4
AHR	211	Residential System Design	2	2	3
CIS	110	Introduction to Computers	2	2	3
MAT	143	Quantitative Literacy	2	2	3

#### **Second Year-Fall**

AHR	213	HVACR Building Code	1	2	2
ENG	111	Writing and Inquiry	3	0	3
WBL	120	Career Readiness/Explore/Employ.	2	3	3

### ***Certificate Program (C35100)***

Title	Class/Lab/Credit				
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#### **I. Major Courses**

AHR	110	Introduction to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4
AHR	160	Refrigeration Certification	1	0	1

**Total Credits: 17**

### ***Recommended Semester Schedule***

#### **First Year-Fall**

AHR	110	Introduction to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
AHR	160	Refrigeration Certification	1	0	1

#### **First Year-Spring**

AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4

# Applied Engineering Technology

A40130 (Associate Degree), D40130 (Diploma), C40130 (Certificate)

Applied Engineering Technology is a course of study that prepares the students to use basic engineering principles and technical skills to solve technical problems in various types of industry. The course work emphasizes analytical and problem solving skills. The curriculum includes courses in safety, math, physics, electricity, engineering technology, and technology specific specialty areas. Graduates should qualify for employment in a wide range of positions in research and development, manufacturing, sales, design, inspection, or maintenance. Employment opportunities exist in automation, computer, electrical, industrial, or mechanical engineering fields, where graduates will function as engineering technicians.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title			Class/Lab/Credit		
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/ Trigonometry	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76

## II. Major Courses

### A. Core Courses

EGR	125	Applied Software for Technology	1	2	2
ISC	112	Industrial Safety	2	0	2

### III. Concentration

DFT	119	Basic CAD	1	2	2
ELC	131	Circuit Analysis I	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ELC	128	Introduction to PLC	2	3	3
ATR	112	Introduction to Automation	2	3	3

## IV. Other Major Courses

Take 3 credits

WBL	120	Career Readiness/Explore/Employ	2	3	3
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Take 29 credits

AHR	110	Introduction to Refrigeration	2	6	5
CIS	110	Introduction to Computers	2	2	3
ELN	133	Digital Electronics	3	3	4
ELN	233	Microprocessor Systems	3	3	4
EGR	150	Introduction to Engineering	1	2	2
MEC	130	Mechanisms	2	2	3
MEC	161	Manufacturing Processes I	3	0	3
MNT	110	Introduction to Maintenance Procedures		1	3 2
PHY	131	Physics-Mechanics	3	2	4
WLD	112	Basic Welding Processes	1	3	2
WBL	111	Work-Based Learning I	0	0	1

WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

#### **V. Other Required Courses**

ACA 115	Success and Study Skills	0	2	1
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**Total Credits:** 67

#### ***Recommended Semester Schedule***

##### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
EGR	125	Applied Software for Tech	1	2	2
ELC	131	Circuit Analysis	3	3	4
ELN	133	Digital Electronics	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	112	Industrial Safety	2	0	2

##### **First Year-Spring**

CIS	110	Introduction to Computers	2	2	3
DFT	119	Basic CAD	1	2	2
ELC	128	Introduction to PLC	2	3	3
ENG	111	Writing and Inquiry	3	0	3
MNT	110	Introduction to Maintenance Procedures		1	3 2

##### **First Year-Summer**

MAT	121	Algebra/ Trigonometry	2	2	3
Humanities Elective			3	0	3
Social Science Elective			3	0	3

##### **Second Year-Fall**

AHR	110	Introduction to Refrigeration	2	6	5
ATR	112	Introduction to Automation	2	3	3
MEC	130	Mechanisms	2	3	3
WLD	112	Basic Welding Processes	1	3	2

##### **Second Year-Spring**

COM	231	Public Speaking	3	0	3
EGR	150	Introduction to Engineering	1	2	2
ELN	233	Microprocessors Systems	3	3	4
PHY	131	Physics-Mechanics	3	2	4
WBL	120	Career Readiness/Explore/Employ	2	3	3

**Note:** WBL 111, 112, 113, 114, 121, 122, 123, 124, 131, 132, 133, 134, 211, 212, 213, 214 may count for any of the following:  
ELN 133, MNT 110, MEC 130, WLD 112, PHY 131, EGR 150, ELN 233

### **Applied Engineering Diploma Program (D40130)**

Title			Class/Lab/Credit		
I. General Education Courses					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
II. Major Courses					
ATR	112	Introduction to Automation	2	3	3
DFT	119	Basic CAD	1	2	2
EGR	125	Applied Software Technology	1	2	2
ELC	128	Introduction to PLC	2	3	3
ELC	131	Circuit Analysis I	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	112	Industrial Safety	2	0	2
III. Other Major Courses					
CIS	110	Introduction to Computers	2	2	3
ELN	233	Microprocessor Systems	3	3	4
MNT	110	Introduction to Maintenance Procedures		1	3 2
WBL	120	Career Readiness/Explore/Employ	2	3	3
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1
Total Credits: 38					

#### ***Recommended Semester Schedule***

##### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
EGR	125	Applied Software Technology	1	2	2
ELC	131	Circuit Analysis I	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	112	Industrial Safety	2	0	2

##### **First Year-Spring**

DFT	119	Basic CAD	1	2	2
ELC	128	Introduction to PLC	2	3	3



ELN	233	Microprocessors Systems	3	3	4
ENG	111	Writing and Inquiry	3	0	3
MNT	110	Introduction to Maintenance Procedures		1	3 2

#### **Second Year-Fall**

ATR	112	Introduction to Automation	2	3	3
CIS	110	Introduction to Computers	2	2	3
COM	231	Public Speaking	3	0	3
WBL	120	Career Readiness/Explore/Employ	2	3	3

### **Applied Engineering Certificate Program (C40130)**

Title	Class/Lab/Credit				
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#### **I. Major Courses**

ATR	112	Introduction to Automation	2	3	3
DFT	119	Basic CAD	1	2	2
ELC	131	Circuit Analysis	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	112	Industrial Safety	2	0	2

#### **II. Other Major Courses**

MNT	110	Introduction to Maintenance Procedures		1	3 2
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**Total Credits: 16**

#### ***Recommended Semester Schedule***

##### **First Year-Fall**

ATR	112	Introduction to Automation	2	3	3
ELC	131	Circuit Analysis I	3	3	4
ISC	112	Industrial Safety	2	0	2
HYD	110	Hydraulics/Pneumatics I	2	3	3

##### **First Year-Spring**

DFT	119	Basic CAD	1	2	2
MNT	110	Introduction to Maintenance Procedures		1	3 2

# Automotive Systems Technology

A60160 (Associate Degree) D60160 (Diploma) C60160 (Certificate)

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission/transaxles, and sustainable transportation, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

**Automotive Systems Technology:** A program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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## I. General Education Courses

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

## II. Major Courses

TRN	111	Chassis Maint./Light Repair	2	6	4
TRN	130	Intro. to Sustainable Transportation	2	2	3
TRN	140	Transportation Climate Control	1	2	2

## III. Concentration

AUT	116	Engine Repair	2	3	3
AUT	141	Suspension and Steering Systems	2	3	3
AUT	151	Brake Systems	2	3	3
AUT	181	Engine Performance-1	2	3	3

## IV. Other Major Courses

**Take 36 credits:**

AUT	113	Automotive Servicing I	0	6	2
AUT	116A	Engine Repair Lab	0	3	1
AUT	141A	Suspension and Steering Lab	0	3	1
AUT	151A	Brake Systems Lab	0	3	1
AUT	181A	Engine Performance I Lab	0	3	1
AUT	183	Engine Performance-2	2	6	4
AUT	221	Auto Transmissions/Transaxles	2	3	3
AUT	221A	Auto Transmissions/Transaxles Lab	0	3	1
AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3	1
TRN	112	Powertrain Maint./Light Repair	2	6	4

TRN	120	Basic Transportation Electricity	4	3	5
TRN	140A	Transportation Climate Control Lab	1	2	2
TRN	145	Advanced Transportation Electronics	2	3	3
TRN	170	PC Skills for Transportation	1	2	2
TRN	180	Basic Welding for Transportation	1	4	3
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

### III. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1

**Total Credits: 74**

### *Recommended Semester Schedule*

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
TRN	120	Basic Transportation Electricity	4	3	5
TRN	170	PC Skills for Transportation	1	2	2

#### **First Year-Spring**

AUT	181	Engine Performance I	2	3	3
AUT	181A	Engine Performance I Lab	0	3	1
MAT	143	Quantitative Literacy	2	2	3
TRN	111	Chassis Maint./Light Repair	2	6	4
TRN	145	Adv. Transportation Electronics	2	3	3

#### **First Year-Summer**

AUT	183	Engine Performance II	2	6	4
TRN	140	Transportation Climate Control	1	2	2
TRN	140A	Transportation Climate Control Lab	1	2	2
Humanities Elective-see page 76			3	0	3

#### **Second Year-Fall**

AUT	221	Auto Transmissions/Transaxles	2	3	3
AUT	221A	Auto Transmissions/Transaxles Lab	0	3	1
AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3	1

TRN	180	Basic Welding for Transportation	1	4	3
Social/Behavioral Science Elective- See page 76			3	0	3

### Second Year-Spring

ACA	220	Professional Transition	1	0	1
AUT	113	Automotive Servicing I	0	6	2
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
TRN	112	Powertrain Maint./Light Repair	2	6	4
TRN	130	Intro. to Sustainable Transportation	2	2	3

### Second Year-Summer

AUT	141	Suspension and Steering Systems	2	3	3
AUT	141A	Suspension and Steering Lab	0	3	1
AUT	151	Brake Systems	2	3	3
AUT	151A	Brake Systems Lab	0	3	1

**Note:** WBL 111, 112, 113, 114, 121, 122, 123, 124, 131, 132, 133, 134, 211, 212, 213, 214 may count for any of the following:  
AUT 116, AUT 116A, TRN 120, TRN 111, TRN 145, AUT 183, AUT 221, AUT 221A, AUT 231, AUT 231A, AUT 113, TRN 112

## *Diploma Program (D60160)*

Title	Class/Lab/Credit
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### I. General Education Courses

ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3

### II. Major Courses

AUT	116	Engine Repair	2	3	3
TRN	130	Intro. to Sustainable Transportation	2	2	3

### III. Concentration

AUT	141	Suspension and Steering Systems	2	3	3
AUT	151	Brake Systems	2	3	3
AUT	181	Engine Performance-1	2	3	3

### IV. Other Major Courses

AUT	113	Automotive Servicing I	0	6	2
AUT	116A	Engine Repair Lab	0	3	1
AUT	141A	Suspension and Steering Lab	0	3	1
AUT	151A	Brake Systems Lab	0	3	1
AUT	181A	Engine Performance I Lab	0	3	1
AUT	183	Engine Performance-2	2	6	4
AUT	221	Auto Transmissions/Transaxles	2	3	3
AUT	221A	Auto Transmissions/Transaxles Lab	0	3	1

AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3	
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3		1
TRN	120	Basic Transportation Electricity	4	3	5	
TRN	170	PC Skills for Transportation	1	2	2	
WBL	111	Work-Based Learning I	0	0	1	
WBL	112	Work-Based Learning I	0	0	2	
WBL	113	Work-Based Learning I	0	0	3	
WBL	114	Work-Based Learning I	0	0	4	
WBL	121	Work-Based Learning II	0	0	1	
WBL	122	Work-Based Learning II	0	0	2	
WBL	123	Work-Based Learning II	0	0	3	
WBL	124	Work-Based Learning II	0	0	4	
WBL	131	Work-Based Learning III	0	0	1	
WBL	132	Work-Based Learning III	0	0	2	
WBL	133	Work-Based Learning III	0	0	3	
WBL	134	Work-Based Learning III	0	0	4	
WBL	211	Work-Based Learning IV	0	0	1	
WBL	212	Work-Based Learning IV	0	0	2	
WBL	213	Work-Based Learning IV	0	0	3	
WBL	214	Work-Based Learning IV	0	0	4	

### III. Other Required Courses

ACA	115	Success and Study Skills	0	2	1	
ACA	220	Professional Transition	1	0	1	

**Total Credits: 48**

### *Recommended Semester Schedule*

#### First Year-Fall

ACA	115	Success and Study Skills	0	2	1	
AUT	116	Engine Repair	2	3	3	
AUT	116A	Engine Repair Lab	0	3	1	
TRN	120	Basic Transportation Electricity	4	3	5	
TRN	170	PC Skills for Transportation	1	2	2	

#### First Year-Spring

AUT	181	Engine Performance I	2	3	3	
AUT	181A	Engine Performance I Lab	0	3	1	
MAT	110	Mathematical Measurement and Literacy	2	2	3	

#### First Year-Summer

AUT	183	Engine Performance II	2	6	4	
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#### Second Year-Fall

AUT	221	Auto Transmissions/Transaxles	2	3	3	
AUT	221A	Auto Transmissions/Tranaxles Lab	0	3	1	
AUT	231	Manual Transmissions/Transaxles/Drivetrains	2	3	3	
AUT	231A	Manual Transmissions/Transaxles/Drivetrains Lab	0	3		1

#### Second Year-Spring

ACA	220	Professional Transition	1	0	1	
AUT	113	Automotive Servicing I	0	6	2	
ENG	101	Applied Communications I	3	0	3	

TRN	130	Intro. to Sustainable Transportation	2	2	3
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#### **Second Year-Summer**

AUT	141	Suspension and Steering Systems	2	3	3
AUT	141A	Suspension and Steering Systems Lab	0	3	1
AUT	151	Brake Systems	2	3	3
AUT	151A	Brake Systems Lab	0	3	1

### ***Certificate Program (C60160)***

Title	Class/Lab/Credit				
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#### **I. Major Courses**

AUT	141	Suspension and Steering Systems	2	3	3
AUT	141A	Suspension and Steering Lab	0	3	1
AUT	151	Brake Systems	2	3	3
AUT	151A	Brake Systems Lab	0	3	1
AUT	181	Engine Performance-I	2	3	3
AUT	181A	Engine Performance I Lab	0	3	1
TRN	170	PC Skills for Transportation	1	2	2
TRN	180	Basic Welding for Transportation	1	4	3

**Total Credits: 17**

### ***Recommended Semester Schedule***

#### **First Year-Fall**

AUT	141	Suspension and Steering Systems	2	3	3
AUT	141A	Suspension and Steering Lab	0	3	1
TRN	170	PC Skills for Transportation	1	2	2

#### **First Year-Spring**

AUT	181	Engine Performance I	2	3	3
AUT	181A	Engine Performance I Lab	0	3	1

#### **First Year-Summer**

AUT	151	Brake Systems	2	3	3
AUT	151A	Brake Systems Lab	0	3	1
TRN	180	Basic Welding for Transportation	1	4	3



# Basic Law Enforcement Training

C55120 (Certificate)

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments or with private enterprise.

This program utilizes State Commission mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic and alcohol beverage laws; investigative, patrol, custody and court procedures; emergency responses; and ethics and community relations.

Students must successfully complete and pass all units of study which include the certification examinations mandated by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission to receive a certificate.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

*\*Enrollment in this program may be limited. Special admissions procedures may apply. Contact the BLET Coordinator for additional information.*

Title	Class/Lab/Credit
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## I. Major Courses

CJC	110	Basic Law Enforcement BLET	10	30	20
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**Total Credits: 20**

# Business Administration

## A25120B (Associate Degree)

This curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions and large to small business or industry.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

<b>II. Major Courses</b>					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	115	Business Law I	3	0	3
BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	120	Principles of Marketing	3	0	3

<b>III. Concentration</b>					
BUS	125	Personal Finance	3	0	3
BUS	153	Human Resources Management	3	0	3
BUS	225	Business Finance	2	2	3
BUS	147	Business Insurance	3	0	3

## **IV. Other Major Courses** (Take 21 credits from this list. Must be selected from identified prefixes)

ACC	121	Principles of Managerial Accounting	3	2	4
BUS	230	Small Business Management	3	0	3
BUS	280	REAL Small Business	4	0	4
CTS	130	Spreadsheet	2	2	3
DBA	110	Database Concepts	2	3	3
ECO	252	Principles of Macroeconomics	3	0	3
MKT	123	Fundamentals of Selling	3	0	3
OST	131	Keyboarding	1	2	2
OST	136	Word Processing	2	2	3
OST	236	Adv. Word/Information Processing	2	2	3
OST	286	Professional Development	3	0	3
WBL	111	Work-Based Learning I	0	10	1

**V. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 71*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

**First Year-Spring**

ACC	121	Principles of Managerial Accounting	3	2	4
BUS	115	Business Law	3	0	3
CTS	130	Spreadsheet	3	2	3
MKT	120	Principles of Marketing	3	0	3
Humanities/Social Sciences Elective-See list on page 75			3	0	3

**First Year-Summer**

BUS	147	Business Insurance	3	0	3
BUS	230	Small Business Management	3	0	3

**Second Year-Fall**

BUS	125	Personal Finance	3	0	3
BUS	137	Principles of Management	3	0	3
BUS	225	Business Finance	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	123	Fundamentals of Selling	3	0	3

**Second Year-Spring**

BUS	153	Human Resource Management	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
OST	286	Professional Development	3	0	3
OST	136	Word Processing	2	2	3
Humanities/Social Sciences Elective-See list on page 76			3	0	3

**Second Year-Summer**

COM	231	Public Speaking	3	0	3
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# Business Administration

## Concentration: Marketing

A25120M (Associate Degree)

Marketing and Retailing is a concentration under the curriculum title of Business Administration. This curriculum is designed to provide students with fundamental skills in marketing and retailing.

Course work includes: marketing, retailing, merchandising, selling, advertising, computer technology and management.

Graduates should qualify for marketing positions within organizations and employment in retailing services and product businesses.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on Page 76.					

<b>II. Major Courses</b>					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	115	Business Law I	3	0	3
BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	120	Principles of Marketing	3	0	3

<b>III. Concentration</b>					
MKT	123	Fundamentals of Selling	3	0	3
MKT	220	Advertising & Sales Promotion	3	0	3
MKT	225	Market Research	3	0	3
MKT	227	Marketing Applications	3	0	3
MKT	232	Social Media Marketing	3	2	4

<b>IV. Other Major Courses</b>					
Take 16 credits from this list:					
ACC	121	Principles of Managerial Accounting	3	2	4
BUS	280	REAL Small Business	4	0	4
WBL	111	Co-Op Experience	0	10	1
CTS	130	Spreadsheet I	2	2	3
DBA	110	Database Concepts	2	3	3
ECO	252	Principles of Macroeconomics	3	0	3
MKT	121	Retailing	3	0	3
MKT	224	International Marketing	3	0	3
MKT	230	Public Relations	3	0	3
OST	131	Keyboarding	1	2	2
OST	136	Word Processing	2	2	3
OST	286	Professional Development	3	0	3

**V. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 70*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MKT	232	Social Media Marketing	3	2	4

**First Year-Spring**

BUS	115	Business Law	3	0	3
CTS	130	Spreadsheet I	3	2	3
MKT	120	Principles of Marketing	3	0	3
MKT	224	International Marketing	3	0	3
Humanities/Social Sciences Elective-See list on page 76			3	0	3

**First Year-Summer**

COM	231	Public Speaking	3	0	3
MKT	220	Advertising & Sales Promotion	3	0	3

**Second Year-Fall**

ACC	120	Principles of Financial Accounting	3	2	4
ECO	251	Principles of Microeconomics	3	0	3
BUS	137	Principles of Management	3	0	3
MKT	123	Fundamentals of Selling	3	0	3
MKT	121	Retailing	3	0	3

**Second Year-Spring**

ACC	121	Principles of Managerial Accounting	3	2	4
ECO	252	Principles of Macroeconomics	3	0	3
MKT	225	Market Research	3	0	3
Humanities/Social Sciences Elective-See list on page 76			3	0	3

**Second Year-Summer**

MKT	227	Marketing Applications	3	0	3
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# *Business Administration*

## **Concentration: Operations Management**

A25120O(Associate Degree) C251200 (Certificate)

Operations Management is a concentration under the curriculum title of Business Administration. This curriculum is designed to educate individuals in the technical and managerial aspects of operations for manufacturing and service industries.

Emphasized are analytical reasoning, problem solving and continuous improvement concepts required in today's dynamic business and industry environments. Concepts include quality, productivity, organizational effectiveness, financial analysis and the management of human, physical and information resources.

Graduates should qualify for leadership positions or enhance their professional skills in supervision, team leadership, operations planning, quality assurance, manufacturing and service management, logistics/distribution, health and safety, human resources management and inventory/materials management.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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### **I. General Education Courses**

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

### **II. Major Courses**

ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	115	Business Law I	3	0	3
BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	120	Principles of Marketing	3	0	3

### **III. Concentration**

ISC	121	Environmental Health & Safety	3	0	3
ISC	130	Introduction to Quality Control	3	0	3
ISC	210	Operation & Production Planning	3	0	3
OMT	112	Materials Management	3	0	3
OMT	260	Issues in Operations Management	3	0	3

### **IV. Other Major Courses** (Take 12 credits from this list.)

BUS	135	Principles of Supervision	3	0	3
BUS	153	Human Resource Management	3	0	3
BUS	225	Business Finance	2	2	3
BUS	240	Business Ethics	3	0	3
CTS	130	Spreadsheets	2	2	3
MKT	223	Customer Service	3	0	3
OST	136	Word Processing	2	2	3
OST	286	Professional Development	3	0	3



**V. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 65*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
ISC	121	Environmental Health & Safety	3	0	3

**First Year-Spring**

BUS	115	Business Law	3	0	3
ISC	130	Introduction to Quality Control	3	0	3
MKT	120	Principles of Marketing	3	0	3
OMT	112	Materials Management	3	0	3
Humanities Elective-See list on page 76			3	0	3

**First Year-Summer**

ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

**Second Year-Fall**

BUS	137	Principles of Management	3	0	3
CTS	130	Spreadsheets	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
MKT	223	Customer Service	3	0	3

**Second Year-Spring**

ISC	210	Operations and Production Planning	3	0	3
OST	136	Word Processing	2	2	3
OST	286	Professional Development	3	0	3
PSY	150	General Psychology	3	0	3

**Second Year-Summer**

COM	231	Public Speaking	3	0	3
OMT	260	Issues in Operations Management	3	0	3

***Certificate Program (C251200)***

Title	Class/Lab/Credit
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**I. Major Courses**

BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3

**II. Concentration**

ISC	121	Environmental Health & Safety	3	0	3
ISC	130	Introduction to Quality Control	3	0	3
ISC	210	Operation & Production Planning	3	0	3

**III. Other Major Courses**

OST	136	Word Processing	2	2	3
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**Total Credits: 18*****Recommended Semester Schedule*****First Year-Fall**

BUS	137	Principles of Management	3	0	3
ISC	121	Environmental Health & Safety	3	0	3
OST	136	Word Processing	2	2	3

**First Year-Spring**

CIS	110	Introduction to Computers	2	2	3
ISC	130	Introduction to Quality Control	3	0	3
ISC	210	Operation & Production Planning	3	0	3

# College Transfer - Associate In Arts Program

A10100 (Associate Degree)

This program is designed for students who intend to transfer to a four-year college or university. The student may complete course work equivalent to the first two years of study required for a bachelor's degree. Unless otherwise indicated, classes in this program satisfy the articulation agreement with colleges in the University of North Carolina System and are eligible for transfer to four-year degree programs, provided all other requirements for transfer are satisfied.

The curriculum in the College Transfer/Liberal Arts program is designed to meet students needs. It includes courses in English, humanities/fine arts, foreign languages, mathematics, science, social sciences, and physical education.

The Associate in Arts degree (A.A.) is awarded upon completion of program requirements. Graduates usually transfer to a senior insitution with junior year status. Follow up studies show that community college transfer students are generally successful in their studies at senior institutions.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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## I. General Education Requirements. 45 shc required

### English Composition (6 semester hours)

ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3

### Humanities/Communications (9 semester hours)

#### Take 3 credits

COM	231	Public Speaking	3	0	3
COM	120	Intro to Interpersonal Communication	3	0	3

#### Take 3 credits

ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3

#### Take 3 credits

ART	111	Art Appreciation	3	0	3
DRA	111	Theater Appreciation	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
MUS	110	Music Appreciation	3	0	3

### Social/Behavioral Sciences (9 semester hours)

Select one history course:

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3

Take 2 additional courses from the following:

ECO	251	Principles of Microeconomics	3	0	3
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ECO	252	Principles of Macroeconomics	3	0	3
POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

### Natural Science and Math (8 semester hours)

Select one science course:

BIO	111	General Biology I	3	3	4
CHM	151	General Chemistry I	3	3	4
GEL	111	Introduction to Geology	3	2	4

Select one math courses:

MAT	143	Quantitative Literacy	2	2	3
MAT'	152	Statistical Methods	3	2	4
MAT	171	Precalculus Algebra	3	2	4

## II. Additional General Education

Take 3 groups

Take 3 credits:

CIS	110	Introduction to Computers	3	0	3
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Take 3 credits:

MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Pre-Calculus Algebra	3	2	4
MAT	172	Pre-Calculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4

Take 8 credits

ART	111	Art Appreciation	3	0	3
ASL	111	Elementary ASL I	3	0	3
ASL	112	Elementary ASL II	3	0	3
AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CIS	115	Intro. to Prog. & Logic	3	0	3
COM	110	Introduction to Communications	3	0	3
COM	120	Introduction to Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
ENG	114	Prof. Research and Reporting	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
FRE	111	Elementary French I	3	0	3
FRE	112	Elementary French II	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3

HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology and Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Intro. to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	General Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	225	Social Diversity	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3

### III. Other Requirements (15 semester hours)

#### Local MTCC Requirements

##### Take:

ACA	122	College Transfer Success	1	0	1
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##### Take one course:

HEA	110	Personal Health/Wellness	3	0	3
PED	110	Fit and Well for Life	1	2	2

##### Take 12 credits:

ACC	120	Principles of Financial Accounting I	3	2	4
ACC	121	Principles of Financial Accounting II	3	2	4
ART	111	Art Appreciation	3	0	3
ART	121	Two-Dimensional Design	0	6	3
ART	171	Digital Design I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
ASL	111	Elementary ASL I	3	0	3
ASL	112	Elementary ASL II	3	0	3

ASL	181	ASL Lab I	0	2	1	
ASL	182	ASL Lab II	0	2	1	
AST	151	General Astronomy I	3	0	3	
AST	151A	General Astronomy I Lab	0	2	1	
AST	152	General Astronomy II	3	0	3	
AST	152A	General Astronomy II Lab	0	2	1	
BIO	111	General Biology I	3	3	4	
BIO	112	General Biology II	3	3	4	
BIO	155	Nutrition	3	0	3	
BIO	163	Basic Anatomy and Physiology	4	2	5	
BIO	168	Anatomy and Physiology I	3	3	4	
BIO	169	Anatomy and Physiology II	3	3	4	
BIO	175	General Microbiology	2	2	3	
BIO	275	Microbiology	3	3	4	
BUS	110	Introduction to Business	3	0	3	
BUS	115	Business Law	3	0	3	
BUS	137	Principles of Management	3	0	3	
CHM	131	Introduction to Chemistry	3	0	3	
CHM	131A	Introduction to Chemistry Lab	0	3	1	
CHM	132	Organic and Biochemistry	3	3	4	
CHM	151	General Chemistry I	3	3	4	
CHM	152	General Chemistry II	3	3	4	
CIS	115	Introduction to Programming and Logic		2	3	3
COM	110	Introduction to Communication	3	0	3	
COM	120	Introduction to Interpersonal Communication	3	0	3	
COM	231	Public Speaking	3	0	3	
CSC	134	C++ Programming	2	3	3	
CSC	151	JAVA Programming	2	3	3	
CTS	115	Info. Systems Business Concepts	3	0	3	
DRA	111	Theatre Appreciation	3	0	3	
DRA	126	Storytelling	3	0	3	
ECO	251	Principles of Microeconomics	3	0	3	
ECO	252	Principles of Macroeconomics	3	0	3	
EDU	131	Child, Family and Community	3	0	3	
EDU	144	Child Development I	3	0	3	
EDU	145	Child Development II	3	0	3	
EDU	216	Foundations of Education	3	0	3	
EDU	221	Children with Exceptionalities	3	0	3	
EGR	150	Introduction to Engineering	1	2	2	
EGR	220	Engineering Statistics	3	0	3	
ENG	114	Prof. Research & Reporting	3	0	3	
ENG	125	Creative Writing I	3	0	3	
ENG	231	American Literature I	3	0	3	
ENG	232	American Literature II	3	0	3	
ENG	241	British Literature I	3	0	3	
ENG	242	British Literature II	3	0	3	
ENG	271	Contemporary Literature	3	0	3	
ENG	273	African-American Literature	3	0	3	
FRE	111	Elementary French I	3	0	3	
FRE	112	Elementary French II	3	0	3	
HEA	110	Personal Health/Wellness	3	0	3	
HIS	111	World Civilizations I	3	0	3	
HIS	112	World Civilizations II	3	0	3	
HIS	131	American History I	3	0	3	
HIS	132	American History II	3	0	3	
HUM	110	Technology & Society	3	0	3	
HUM	115	Critical Thinking	3	0	3	

HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PED	110	Fit and Well for Life	1	2	2
PED	111	Physical Fitness I	0	3	1
PED	113	Aerobics I	0	3	1
PED	117	Weight Training I	0	3	1
PED	120	Walking For Fitness	0	3	1
PED	128	Golf-Beginning	0	2	1
PED	130	Tennis-Beginning	0	2	1
PED	139	Bowling-Beginning	0	2	1
PED	152	Swimming-Beginning	0	2	1
PED	155	Water Aerobics	0	2	1
PED	174	Wilderness Pursuits	0	2	1
PED	219	Disc Golf	0	2	1
PHI	210	History of Philosophy	3	0	3
PHI	240	Introduction to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	130	State & Local Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	Intro. to Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	225	Social Diversity	3	0	3
SOC	242	Sociology of Deviance	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	181	Spanish Lab I	0	2	1
SPA	182	Spanish Lab II	0	2	1
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3
SPA	281	Spanish Lab III	0	2	1
SPA	282	Spanish Lab IV	0	2	1

**Total Credits: 60-61**



# College Transfer - Associate In Science Program

(Associate Degree A10400)

This program is designed for students who intend to transfer to a four-year college or university. The student may complete course work equivalent to the first two years of study required for a bachelor's degree. Unless otherwise indicated, classes in this program satisfy the articulation agreement with colleges in the University of North Carolina System and are eligible for transfer to four-year degree programs, provided all other requirements for transfer are satisfied.

The Associate in Science degree (A.S.) is awarded upon completion of program requirements. Graduates usually transfer to a senior institution with junior year status. Follow up studies show that community college transfer students are generally successful in their studies at senior institutions.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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## I. General Education Requirements.

### Natural Science

#### Take 1 of 3 Groups

##### Group 1

##### Take 8 credits from:

BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4

##### Group 2

##### Take 8 credits from:

CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4

##### Group 3

##### Take 8 credits from:

PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4

### Math

#### Take 8 credits from:

MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	263	Brief Calculus	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4

### Required Courses (6 semester hours)

ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3

### Humanities/Communications (6 semester hours)

Select one course from the following:

COM	120	Intro to Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3

Select one course from the following:

ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3

### **Social/Behavioral Sciences (6 semester hours)**

Select one history course:

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3

Select one of the following:

ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

## **II. Additional General Education (11 semester hours)**

### **Take 2 Groups**

#### **Take 3 credits:**

CIS	110	Intro to Computers	2	2	3
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#### **Take 8 credits:**

ART	111	Art Appreciation	3	0	3	
ASL	111	Elementary ASL I	3	0	3	
ASL	112	Elementary ASL II	3	0	3	
AST	151	General Astronomy I	3	0	3	
AST	151A	General Astronomy I Lab	0	2	1	
AST	152	General Astronomy II	3	0	3	
AST	152A	General Astronomy II Lab	0	2	1	
BIO	111	General Biology I	3	3	4	
BIO	112	General Biology II	3	3	4	
CHM	131	Introduction to Chemistry	3	0	3	
CHM	131A	Introduction to Chemistry Lab	0	3	1	
CHM	132	Organic and Biochemistry	3	3	4	
CHM	151	General Chemistry I	3	3	4	
CHM	152	General Chemistry II	3	3	4	
CIS	115	Introduction to Prog. & Logic	2	3	3	
COM	110	Introduction to Communications	3	0	3	
COM	120	Intro. to Interpersonal Communications		3	0	3
COM	231	Public Speaking	3	0	3	
DRA	111	Theatre Appreciation	3	0	3	
DRA	126	Storytelling	3	0	3	
ECO	251	Principles of Microeconomics	3	0	3	
ECO	252	Principles of Macroeconomics	3	0	3	
ENG	114	Prof. Research & Reporting	3	0	3	
ENG	231	American Literature I	3	0	3	
ENG	232	American Literature II	3	0	3	
ENG	241	British Literature I	3	0	3	
ENG	242	British Literature II	3	0	3	
FRE	111	Elementary French I	3	0	3	
FRE	112	Elementary French II	3	0	3	
GEL	111	Introduction to Geology	3	2	4	
HIS	111	World Civilizations I	3	0	3	
HIS	112	World Civilizations II	3	0	3	

HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology & Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Intro. to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	General Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	225	Social Diversity	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3

### III. Other Requirements (15 semester hours)

Local MTCC Requirements (3 semester hours)

Take:

ACA	122	College Transfer Success	1	0	1
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Take one course:

HEA	110	Personal Health/Wellness	3	0	3
PED	110	Fit and Well for Life	1	2	2

Select 12 additional semester hours from the following list:

ACC	120	Principles of Financial Accounting I	3	2	4
ACC	121	Principles of Financial Accounting II	3	2	4
ART	111	Art Appreciation	3	0	3
ART	121	Two-Dimensional Design	0	6	3
ART	171	Digital Design I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
ASL	111	Elementary ASL I	3	0	3
ASL	112	Elementary ASL II	3	0	3

ASL	181	ASL Lab I	0	2	1	
ASL	182	ASL Lab II	0	2	1	
AST	151	General Astronomy I	3	0	3	
AST	151A	General Astronomy I Lab	0	2	1	
AST	152	General Astronomy II	3	0	3	
AST	152A	General Astronomy II Lab	0	2	1	
BIO	111	General Biology I	3	3	4	
BIO	112	General Biology II	3	3	4	
BIO	155	Nutrition	3	0	3	
BIO	163	Basic Anatomy and Physiology	4	2	5	
BIO	168	Anatomy and Physiology I	3	3	4	
BIO	169	Anatomy and Physiology II	3	3	4	
BIO	175	General Microbiology	2	2	4	
BIO	275	Microbiology	3	3	4	
BUS	110	Introduction to Business	3	0	3	
BUS	115	Business Law I	3	0	3	
BUS	137	Principles of Management	3	0	3	
CHM	131	Introduction to Chemistry	3	0	3	
CHM	131A	Introduction to Chemistry Lab	0	3	1	
CHM	132	Organic and Biochemistry	3	3	4	
CHM	151	General Chemistry I	3	3	4	
CHM	152	General Chemistry II	3	3	4	
CIS	115	Introduction to Programming and Logic		2	3	3
COM	120	Introduction to Interpersonal Communication	3	0	3	
COM	231	Public Speaking	3	0	3	
CSC	134	C++ Programming	2	3	3	
CSC	151	JAVA Programming	2	3	3	
CTS	115	Info. Systems Business Concepts	3	0	3	
DRA	111	Theatre Appreciation	3	0	3	
DRA	126	Storytelling	3	0	3	
ECO	251	Principles of Microeconomics	3	0	3	
ECO	252	Principles of Macroeconomics	3	0	3	
EDU	131	Child, Family and Community	3	0	3	
EDU	144	Child Development I	3	0	3	
EDU	145	Child Development II	3	0	3	
EDU	216	Foundations of Education	3	0	3	
EDU	221	Children with Exceptionalities	3	0	3	
EGR	150	Intro. to Engineering	1	2	2	
EGR	220	Engineering Statistics	1	2	2	
ENG	114	Prof. Research & Reporting	3	0	3	
ENG	125	Creative Writing	3	0	3	
ENG	231	American Literature I	3	0	3	
ENG	232	American Literature II	3	0	3	
ENG	241	British Literature I	3	0	3	
ENG	242	British Literature II	3	0	3	
ENG	271	Contemporary Literature	3	0	3	
ENG	273	African-American Literature	3	0	3	
FRE	111	Elementary French I	3	0	3	
FRE	112	Elementary French II	3	0	3	
GEL	111	Geology	3	2	4	
HEA	110	Personal Health/Wellness	3	0	3	
HIS	111	World Civilizations I	3	0	3	
HIS	112	World Civilizations II	3	0	3	
HIS	131	American History I	3	0	3	
HIS	132	American History II	3	0	3	
HUM	110	Technology & Society	3	0	3	
HUM	115	Critical Thinking	3	0	3	

HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	0	3
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PED	111	Physical Fitness I	0	3	1
PED	113	Aerobics I	0	3	1
PED	117	Weight Training I	0	3	1
PED	120	Walking for Fitness	0	3	1
PED	128	Golf-Beginning	0	2	1
PED	130	Tennis-Beginning	0	2	1
PED	139	Bowling-Beginning	0	2	1
PED	152	Swimming-Beginning	0	2	1
PED	155	Water Aerobics	0	3	1
PED	174	Wilderness Pursuits	0	2	1
PED	219	Disc Golf	0	2	1
PHI	210	History of Philosophy	3	0	3
PHI	240	Intro. to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	130	State & Local Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	Intro. to Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religions	3	0	3
REL	211	Intro. to Old Testament	3	0	3
REL	212	Intro. to New Testament	3	0	3
SOC	210	Intro. to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	225	Social Diversity	3	0	3
SOC	242	Sociology of Deviance	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	181	Spanish Lab I	0	2	1
SPA	182	Spanish Lab II	0	2	1
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3
SPA	281	Spanish Lab III	0	2	1
SPA	282	Spanish Lab IV	0	2	1

**Total Credits: 60**

# Computer Integrated Machining

A50210 (Associate) D50210 (Diploma) C50210C, C50210D, C50210M (Certificates)

This curriculum prepares students with the analytical, creative and innovative skills necessary to take a production idea from an initial concept through design development and production, resulting in a finished product.

Coursework may include manual machining, computer applications, engineering design, computer-aided drafting (CAD), computer-aided machining (CAM), blueprint interpretation, advanced computerized numeric control (CNC) equipment, basic and advanced machining operations, precision measurement and high-speed multi-axis machining.

Graduates should qualify for employment as machining technicians in high-tech manufacturing, rapid-prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech or emerging industries such as aerospace, aviation, medical, and renewable energy and to sit for machining certification examinations.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## Associate Degree Program

Title	Class/Lab/Credit				
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry	2	2	3
Select one course each from page 76:					
Humanities/Fine Arts			3	0	3
Social and Behavioral Science			3	0	3
<b>II. Major Courses</b>					
BPR	111	Print Reading	1	2	2
MAC	121	Introduction to CNC	2	0	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	141	Machining Applications I	2	6	4
MAC	142	Machining Applications II	2	6	4
<b>III. Other Major Requirements</b>					
<b>Take 3 credits</b>					
WBL	120	Career Readiness/Explore/Employ.	2	3	3
<b>Take 30 credits</b>					
CIS	110	Introduction to Computers	2	2	3
DFT	119	Basic CAD	1	2	2
MAC	143	Machining Applications III	2	6	4
MAC	151	Machining Calculations	1	2	2
MAC	152	Advanced Machining Calculations	1	2	2
MAC	222	Advanced CNC Turning	1	3	2
MAC	224	Advanced CNC Milling	1	3	2
MAC	231	CNC Graphics Prog: Turning	1	4	3
MAC	232	CNC Graphics Prog: Milling	1	4	3
MAC	247	Production Tooling	2	0	2
MEC	142	Physical Metallurgy	1	2	2

PLA	110	Introduction to Plastics	2	0	2
WLD	112	Basic Welding Processes	1	3	2
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

#### IV. Other Required Courses

ACA	115	Study Skills	0	2	1
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**Total Credits: 65**

### *Recommended Semester Schedule*

#### **First Year-Fall**

ACA	115	Study Skills	0	2	1
BPR	111	Print Reading	1	2	2
MAC	121	Introduction to CNC	2	0	2
MAC	141	Machining Applications I	2	6	4
MAC	151	Machining Calculations	1	2	2
MAC	247	Production Tooling	2	0	2

#### **First Year-Spring**

CIS	110	Introduction to Computers	2	2	3
DFT	119	Basic CAD	1	2	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	142	Machining Applications II	2	6	4
PLA	110	Introduction to Plastics	2	0	2

#### **First Year-Summer**

ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry	2	2	3
Humanities/Fine Arts Elective- see list on page 75			3	0	3
Social/Behavioral Science Elective-see list on page 75			3	0	3

#### **Second Year-Fall**

MAC	143	Machining Applications III	2	6	4
MAC	222	Advanced CNC Turning	1	3	2
MAC	231	CNC Graphics Prog.: Turning	1	4	3
MEC	142	Physical Metallurgy	1	2	2
WLD	112	Basic Welding Processes	1	3	2



**Second Year-Spring**

COM	231	Public Speaking	3	0	3
MAC	114	Introduction to Metrology	2	0	2
MAC	152	Advanced Machining Calculations	1	2	2
MAC	224	Advanced CNC Milling	1	3	2
MAC	232	CNC Graphics Prog.: Milling	1	4	3
WBL	120	Career Readiness/Explore/Employ.	2	3	3

**Note:** WBL 111, 112, 113, 114, 121, 122, 123, 124, 131, 132, 133, 134, 211, 212, 213, 214 may count for any of the following: MAC 151, MAC 247, DFT 119, MAC 122, MAC 124, PLA 110, WLD 112, MAC 222, MAC 231, MAC 143, MEC 142, MAC 152, MAC 224, MAC 232

***Diploma Program (D50210)***

Title	Class/Lab/Credit
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**I. General Education Courses**

ENG	101	Applied Communications	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3

**II. Major Courses**

BPR	111	Print Reading	1	2	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	141	Machining Applications I	2	6	4
MAC	142	Machining Applications II	2	6	4

**III. Other Major Requirements****Take 3 credits**

WBL	120	Career Readiness/Explore/Employ.	2	3	3
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**Take 15 credits**

CIS	110	Introduction to Computers	2	2	3
DFT	119	Basic CAD	1	2	2
MAC	143	Machining Applications III	2	6	4
MAC	151	Machining Calculations	1	2	2
MEC	142	Physical Metallurgy	1	2	2
PLA	110	Introduction to Plastics	2	0	2
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

**IV. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 39*****Recommended Semester Schedule*****First Year-Fall**

BPR	111	Print Reading	1	2	2
MAC	141	Machining Applications I	2	6	4
MAC	151	Machining Calculations	1	2	2
ACA	115	Success and Study Skills	0	2	1

**First Year-Spring**

DFT	119	Basic CAD	1	2	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	142	Machining Applications II	2	6	4
PLA	110	Introduction to Plastics	2	0	2

**First Year-Summer**

CIS	110	Introduction to Computers	2	2	3
ENG	101	Applied Communications	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3

**Second Year-Fall**

MAC	143	Machining Applications III	2	6	4
MEC	142	Physical Metallurgy	1	2	2
WBL	120	Career Readiness/Explore/Employ.	2	3	3

***CNC Machine Operator Certificate (C50210C)***

Title	Class/Lab/Credit
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**I. Major Courses**

BPR	111	Print Reading	1	2	2
MAC	121	Introduction to CNC	2	0	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	141	Machine Applications I	2	6	4
MAC	142	Machine Applications II	2	6	4

**Total Credits: 16*****Recommended Semester Schedule*****First Year-Fall**

BPR	111	Print Reading	1	2	2
MAC	121	Introduction to CNC	2	0	2
MAC	141	Machine Applications I	2	6	4

**First Year-Spring**

MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	142	Machine Applications II	2	6	4

## ***CAD/CAM Certificate (C50210D)***

Title			Class/Lab/Credit		
<b>I. Major Courses</b>					
BPR	111	Print Reading	1	2	2
MAC	141	Machine Applications I	2	6	4
MAC	142	Machine Applications II	2	6	4
<b>II. Other Major Courses</b>					
MAC	231	CNC Graphics Prog.: Turning	1	4	3
MAC	232	CNC Graphics Prog: Milling	1	4	3
<b>Total Credits: 16</b>					

### ***Recommended Semester Schedule***

#### **First Year-Fall**

BPR	111	Print Reading	1	2	2
MAC	141	Machine Applications I	2	6	4
MAC	231	CNC Graphics Prog.: Turning	1	4	3

#### **First Year-Spring**

MAC	142	Machine Applications II	2	6	4
MAC	232	CNC Graphics Prog: Milling	1	4	3

## ***Manual Machine Operator (C50210M)***

Title			Class/Lab/Credit		
<b>I. Major Courses</b>					
BPR	111	Print Reading	1	2	2
MAC	141	Machine Applications I	2	6	4
MAC	142	Machine Applications II	2	6	4
<b>II. Other Major Courses</b>					
MAC	151	Machine Calculations I	1	2	2
MAC	152	Machine Calculations II	1	2	2
MEC	142	Physical Metallurgy	1	2	2
<b>Total Credits: 16</b>					

### ***Recommended Semester Schedule***

#### **First Year-Fall**

BPR	111	Print Reading	1	2	2
MAC	141	Machine Applications I	2	6	4
MAC	151	Machine Calculations I	1	2	2

#### **First Year-Spring**

MAC	142	Machine Applications II	2	6	4
MAC	152	Machine Calculations II	1	2	2
MEC	142	Physical Metallurgy	1	2	2

# Cosmetology

A55140 (Associate Degree) D55140 (Diploma) C55140 (Certificate)

This curriculum is designed to provide competency-based knowledge, scientific/artistic principles and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Associate Degree Program*

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.					
<b>II. Major Courses</b>					
COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	117	Cosmetology Concepts IV	2	0	2
<b>III. Other Major Courses</b>					
COS	118	Salon IV	0	21	7
COS	224	Trichology Chemistry	1	3	2
COS	240	Contemporary Design	1	3	2
COS	250	Computerized Salon Operation	1	0	1
CTS	115	Information System Business Concepts	3	0	3
<b>IV. Other Required Courses</b>					
ACA	115	Success and Study Skills	0	2	1

**Total Credits: 65**

## *Recommended Semester Schedule*

### DAY AND NIGHT CLASS

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
MAT	143	Quantitative Literacy	2	2	3

**First Year-Spring**

COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
ENG	111	Writing and Inquiry	3	0	3

**First Year-Summer**

COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	250	Computerized Salon Operation	1	0	1
Humanities Elective-See list on page 75			3	0	3

**Second Year-Fall**

COS	117	Cosmetology Concepts IV	2	0	2
COS	118	Salon IV	0	21	7
COS	240	Contemporary Design	1	3	2
COS	224	Trichology Chemistry	1	3	2
Social Sciences Elective-See list on page 75			3	0	3

**Second Year-Spring**

COM	231	Public Speaking	3	0	3
CTS	115	Information Systems Business Concepts	3	0	3

***Diploma Program (D55140)***

Title	Class/Lab/Credit
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**I. General Education Courses**

ENG	101	Applied Communications I	3	0	3
PSY	150	General Psychology	3	0	3

**II. Major Courses**

COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	117	Cosmetology Concepts IV	2	0	2

**III. Other Major Courses**

COS	118	Salon IV	0	21	7
COS	250	Computerized Salon	1	0	1

**Total Credits: 48*****Recommended Semester Schedule*****DAY AND NIGHT CLASS****First Year-Fall**

COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
PSY	150	General Psychology	3	0	3

**First Year-Spring**

COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
ENG	101	Applied Communications I	3	0	3

**First Year-Summer**

COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	250	Computerized Salon Operation	1	0	1

**Second Year-Fall**

COS	117	Cosmetology Concepts IV	2	0	2
COS	118	Salon IV	0	21	7

***Certificate Program (C55140)***

Title	Class/Lab/Credit
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**I. Major Courses**

COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
COS	240	Contemporary Design	1	3	2

**Total Credits: 34**

\*COS 117 and 118 are required for the State Board Certificate and the 1500 hour requirement.

***Recommended Semester Schedule*****DAY AND NIGHT CLASS****First Year-Fall**

COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8

**First Year-Spring**

COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8

**First Year-Summer**

COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4

**Second Year-Fall**

COS	240	Contemporary Design	1	3	2
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# Cosmetology-Esthetics Technology

C55230 (Certificate)

This curriculum provides competency-based knowledge, scientific/artistic principles and hands-on fundamentals associated with the art of skin care. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional Esthetics Technology, business/human relations, product knowledge and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and, upon passing, be licensed and qualified for employment in beauty and cosmetic/skin care salons, as a platform artist, and in related businesses.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

*Students may enter this curriculum at the start of any semester. Availability of this curriculum will be determined by a sufficient number of students enrolling in this program.*

Title	Class/Lab/Credit
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## I. Major Courses

COS	119	Esthetics Concepts I	2	0	2
COS	120	Esthetics Salon I	0	18	6
COS	125	Esthetics Concepts II	2	0	2
COS	126	Esthetics Salon II	0	18	6

**Total Credits: 16**

## Recommended Semester Schedule

### Student Starting in Fall Semester:

#### Fall

COS	119	Esthetics Concepts I	2	0	2
COS	120	Esthetics Salon I	0	18	6

#### Spring

COS	125	Esthetics Concepts II	2	0	2
COS	126	Esthetics Salon II	0	18	6

### Student Starting in Spring Semester:

#### Spring

COS	119	Esthetics Concepts I	2	0	2
COS	120	Esthetics Salon I	0	18	6

#### Summer

COS	125A	Esthetics Concepts II A	1	0	1
COS	126A	Esthetics Salon II A	0	9	3

#### Fall

COS	125B	Esthetics Concepts II B	1	0	1
COS	126B	Esthetics Salon II B	0	9	3

### Student Starting in Summer Semester:

#### Summer

COS	119A	Esthetics Concepts I A	1	0	1
COS	120A	Esthetics Salon I A	0	9	3



**Fall**

COS	119B	Esthetics Concepts I B *	1	0	1
COS	120B	Esthetics Salon I B*	0	9	3
COS	125A	Esthetics Concepts II A **	1	0	1
COS	126A	Esthetics Salon II A **	0	9	3

**Spring**

COS	125B	Esthetics Concepts II B*	1	0	1
COS	126B	Esthetics Salon II B*	0	9	3

\*First 8 weeks only

\*\*Second 8 weeks only

*Students may enter this curriculum at the start of any semester. Availability of this curriculum will be determined by a sufficient number of students enrolling in this program.*

# Cosmetology - Manicurist/Nail Technology

C55400 (Certificate)

This curriculum provides competency-based knowledge, scientific/artistic principles and hands-on fundamentals associated with the nail technology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional nail technology, business/computer principles, product knowledge and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and nail salons, as a platform artist, and in related businesses.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

*\*This curriculum was designed to be taken during the fall or spring semester. No classes are offered during the summer semester. Availability of this curriculum will be determined by a sufficient number of students enrolling in this program. COS 121 will be offered during the first 8 weeks of the semester; COS 122 will be offered during the second 8 weeks of the semester.*

Title	Class/Lab/Credit
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## I. Major Courses

COS	121	Manicure/Nail Technology I	4	6	6
COS	222	Manicure/Nail Technology II	4	6	6

## II. Other Required Hours

BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3

**Total Credits: 18**

## *Recommended Semester Schedule*

### **First Year-Fall\* or Spring\***

BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
COS	121	Manicure/Nail Technology I	4	6	6
COS	222	Manicure/Nail Technology II	4	6	6

# Cosmetology- Instructor

C55160 (Certificate)

This curriculum provides a course of study for learning the skills needed to teach the theory and practice of cosmetology as required by the North Carolina Board of Cosmetic Arts.

Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching and development of evaluation instruments.

Graduates of the program may be employed as cosmetology instructors in public or private education and business.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

*\*This curriculum is offered on an individual basis in fall and spring semester, based on student demand and waiting list.*

Title			Class/Lab/Credit		
<b>I. Major Courses</b>					
COS	271	Instructor Concepts I	5	0	5
COS	272	Instructor Practicum I	0	21	7
COS	273	Instructor Concepts II	5	0	5
COS	274	Instructor Practicum II	0	21	7

**Total Credits: 24**

## *Recommended Semester Schedule*

### **First Year-Fall, Spring**

COS	271	Instructor Concepts I**	5	0	5
and					
COS	272	Instructor Practicum I**	0	21	7
or					
COS	273	Instructor Concepts II**	5	0	5
and					
COS	274	Instructor Practicum II**	0	21	7

*\*This curriculum is offered on an individual basis in fall or spring semesters, based on student demand.*

*\*\*Students may select COS 271 and COS 272 or they may select COS 273 and COS 274 during any one semester. COS 271 and COS 272 are required before COS 273 and COS 274. COE 113 may also be taken.*

# Cosmetology- Esthetics Instructor

C55270 (Certificate)

This curriculum provides a course of study covering the skills needed to teach the theory and practices of esthetics as required by the North Carolina State Board of Cosmetology.

Course work includes all phases of esthetics theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Esthetics Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or esthetics school.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

*\*This curriculum is offered on an individual basis in any semester, based on student demand.*

Title			Class/Lab/Credit		
<b>I. Major Courses</b>					
COS	253	Esthetics Instructor I	6	15	11
COS	254	Esthetics Instructor II	6	15	11

**Total Credits: 22**

## *Recommended Semester Schedule*

### Student Starting in Fall Semester:

#### **Fall**

COS	253	Esthetics Instructor I	6	15	11
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#### **Spring**

COS	254	Esthetics Instructor II	6	15	11
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### Student Starting in Spring Semester:

#### **Spring**

COS	253	Esthetics Instructor I	6	15	11
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#### **Summer**

COS	254A	Esthetics Instructor II A	3	8	6
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#### **Fall**

COS	254B	Esthetics Instructor II B	3	7	5
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# Cyber Crime Technology

A55210 (Associate Degree) C55210A, C55210B (Certificates)

This curriculum will prepare students to enter the field of computer crime investigations and private security. Students completing this curriculum will be capable of investigating computer crimes, properly seize and recover computer evidence and aid in the prosecution of cyber criminals. Course work in this curriculum will include a division of work in the disciplines of criminal justice and computer information systems. Additionally, students will be required to take specific cyber crime classes. Graduates should qualify to become computer crime investigators for local or state criminal justice agencies. Also these graduates should be competent to serve as computer security specialists or consultants with private business.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Associate Degree Program*

Title	Class/Lab/Credit
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### **I. General Education Courses**

COM	231 Public Speaking	3	0	3
ENG	111 Writing and Inquiry	3	0	3
MAT	143 Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page

76

### **II. Major Courses**

CCT	110 Intro to Cyber Crime	3	0	3
CCT	112 Ethics & High Technology	3	0	3
CCT	121 Computer Crime Investigation	3	2	4
CCT	231 Technology Crimes & Law	3	0	3
CCT	289 Capstone Project	1	6	3

### **III. Other Major Courses**

**Take 2 groups:**

**Take 6 hours from:**

CJC	111 Intro to Criminal Justice	3	0	3
CJC	131 Criminal Law	3	0	3
CJC	132 Court Procedure and Evidence	3	0	3
CJC	231 Constitutional Law	3	0	3

**Take 36 hours from:**

CCT	250 Network Vulnerabilities I	2	2	3
CIS	110 Introduction to Computers	3	0	3
CSC	121 Python Programming	2	3	3
CSC	151 JAVA Programming	2	3	3
CTS	120 Hardware/Software Support	2	3	3
CTS	115 Info Systems Business Concepts	3	0	3
DBA	110 Database Concepts	2	3	3
DBA	120 Database Programming I	2	2	3
NET	125 Introduction to Networks	1	4	3
SEC	160 Security Administration I	2	2	3
SEC	260 Security Administration II	2	2	3
WEB	115 Web Markup and Scripting	2	2	3

**IV. Other Required Courses**

ACA 115	Success and Study Skills	0	2	1
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**Total Credits: 74*****Recommended Semester Schedule*****First Year-Fall**

ACA 115	Success and Study Skills	0	2	1
CCT 110	Intro to Cyber Crime	3	0	3
CIS 110	Introduction to Computers	3	0	3
NET 125	Introduction to Networks	1	4	3
WEB 115	Web Markup & Scripting	2	2	3

**First Year-Spring**

CCT 112	Ethics and High Technology	3	0	3
CCT 121	Computer Crime Invest	3	2	4
CTS 120	Hardware/Software Support	2	3	3
DBA 110	Database Concepts	2	3	3

**First Year-Summer**

COM 231	Public Speaking	3	0	3
CSC 121	Python Programming	2	3	3
Humanities Elective		3	0	3
Social Science Elective		3	0	3

**Second Year-Fall**

CCT 231	Technology Crimes & Law	3	0	3
CCT 250	Network Vulnerabilities	2	2	3
CTS 115	Info Sys Business Concepts	3	0	3
SEC 160	Security Administration I	2	2	3

**Second Year-Spring**

DBA 120	Database Programming I	2	2	3
SEC 260	Security Administration II	2	2	3

**Pick Two Courses:**

CJC 111	Intro to Criminal Justice	3	0	3
CJC 131	Criminal Law	3	0	3
CJC 132	Court Procedure and Evidence	3	0	3
CJC 231	Constitutional Law	3	0	3

**Second Year-Summer**

CCT 289	Capstone Project	1	6	3
CSC 151	Java Programming	2	3	3
ENG 111	Expository Writing	3	0	3
MAT 143	Quantitative Literacy	2	2	3

***Cyber Crime Technology Basic Certificate (C55210A)***

Title	Class/Lab/Credit
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**I. Major Courses**

CCT 110	Intro to Cyber Crime	3	0	3
CCT 112	Ethics & High Technology	3	0	3

**II. Other Major Courses**

CIS 110	Introduction to Computers	3	0	3
CTS 120	Hardware/Software Support	2	3	3
DBA 110	Database Concepts	2	3	3
NET 125	Introduction to Networks	1	4	3

**Total Credits: 18*****Recommended Semester Schedule*****First Year Fall**

CCT 110	Intro to Cyber Crime	3	0	3
CIS 110	Introduction to Computers	3	0	3
NET 125	Introduction to Networks	1	4	3

**First Year Spring**

CCT 112	Ethics & High Technology	3	0	3
CTS 120	Hardware/Software Support	2	3	3
DBA 110	Database Concepts	2	3	3

***Cyber Crime Technology Advanced Certificate (C55210B)***

Title	Class/Lab/Credit
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**I. Major Courses**

CCT 121	Computer Crime Investigation	3	2	4
CCT 231	Technology Crimes & Law	3	0	3

**II. Other Major Courses**

CTS 115	Info Systems Business Concepts	3	0	3
CSC 151	JAVA Programming	2	3	3
WEB 115	Web Markup & Scripting	2	2	3

**Total Credits: 16*****Recommended Semester Schedule*****First Year Fall**

CCT 231	Technology Crimes & Law	3	0	3
CTS 115	Info Systems Business Concepts	3	0	3
WEB 115	Web Markup & Scripting	2	2	3

**First Year Spring**

CCT 121	Computer Crime Investigation	3	2	4
CSC 151	JAVA Programming	2	3	3



# Teaching/Training: Early Childhood Education

A55220C (Associate Degree) D55220C (Diploma)

C55220C (Certificate) C55220S (Certificate-Special Education)

C55290C (Certificate-Infant Toddler Care) C55850 (Certificate- Early Childhood Administration)

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## Associate Degree Program

<u>Title</u>	<u>Class/Lab/Credit</u>
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### I. General Education Courses

#### Take 2 Groups:

Group I: Take 6 credits

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3

Group II: (Take 3 credits from each)

Humanities, Social/Behavioral Science and Natural Science/Math (see list on page 145)

### II. Major Courses

#### Take 35 credits from:

EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	153	Health, Safety, Nutrition	3	0	3
EDU	221	Children with Exceptionalities	3	0	3
EDU	234	Infants, Toddlers, and Twos	3	0	3
EDU	280	Language & Literacy Experiences	3	0	3
EDU	284	Early Childhood Capstone	1	9	4

### III. Other Major Courses (Must be selected from identified prefixes)

#### Take 15 credits:

CIS	110	Intro. to Computers	2	2	3
EDU	252	Math and Science Activities	3	0	3
EDU	261	Early Childhood Administration I	3	0	3
PSY	150	General Psychology	3	0	3
EDU	271	Educational Technology	2	2	3

**Other Major Requirements:****Take 2 credits from:**

EDU	184	Early Childhood Practicum	1	3	2
EDU	222	Learn with Behavioral Disorder	3	0	3
EDU	223	Specific Learning Disability	3	0	3
EDU	247	Sensory & Physical Disability	3	0	3
EDU	248	Developmental Delays	3	0	3
EDU	262	Early Childhood Administration II	3	0	3

**IV. Other Required Courses****Take 1 credit:**

ACA	115	Success and Study Skills	0	2	1
ACA	122	College Transfer Success	0	2	1

**Total Credits: 68*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
EDU	119	Introduction to Childhood Education	4	0	4
EDU	144	Child Development I	3	0	3
ENG	111	Expository Writing	3	0	3

Choose from the Natural Science/Math pick list on page 145

**First Year-Spring**

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	184	Early Childhood Practicum	1	3	2

Choose from Humanities/Fine Arts pick list on page 145

**First Year-Summer**

CIS	110	Introduction to Computers	2	2	3
PSY	150	General Psychology	3	0	3

**Second Year-Fall**

EDU	131	Child, Family, & Community	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	221	Children With Exceptionalities	3	0	3
EDU	261	Early Childhood Admin. I	3	0	3
Choose from Social /Behavioral Science pick list on page 145			3	0	3

**Second Year-Spring**

EDU	234	Infant, Toddler and Two's	3	0	3
EDU	271	Educational Technology	2	2	3
EDU	280	Language & Literacy Experiences	3	0	3
EDU	284	Early Childhood Practicum	1	9	4

**Second Year-Summer**

COM	231	Public Speaking	3	0	3
EDU	252	Math and Science Activities	3	0	3

## *Diploma Program (D55220C)*

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
<b>Take 2 groups:</b>					
<u>Group I:</u>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
 <u>Group II:</u> (Take 3 credits)					
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
MAT	143	Quantitative Literacy	2	2	3
 <b>II. Major Courses</b>					
EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	221	Children with Exceptionalities	3	0	3
 <b>III. Other Major Courses</b>					
EDU	184	Early Childhood Practicum	1	3	2
PSY	150	General Psychology	3	0	3
 <b>IV. Other Required Courses</b>					
ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
 <b>Total Credits: 40</b>					

### *Recommended Semester Schedule*

<b>First Year-Fall</b>					
ACA	115	Success and Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
EDU	119	Introduction to Childhood Education	4	0	4
EDU	144	Child Development I	3	0	3
ENG	111	Writing and Inquiry	3	0	3
PSY	150	General Psychology	3	0	3
 <b>First Year-Spring</b>					
COM	231	Public Speaking	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	184	Early Childhood Practicum	1	3	2

**Second Year-Fall**

EDU	131	Child, Family & Community	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	221	Children With Exceptionalities	3	0	3

Choose from Natural Science/Math pick list on page 76

***Early Childhood Certificate Program (C55220C)***

Title	Class/Lab/Credit
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**I. Major Courses**

EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance*	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3

**II. Other Major Courses**

**Total Credits: 16**

***Recommended Semester Schedule*****First Year-Fall**

EDU	119	Introduction to Early Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3

**First Year-Spring**

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3

***Infant/Toddler Care Certificate Program (C55290)***

Title	Class/Lab/Credit
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**I. Major Courses**

EDU	119	Introduction to Early Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	234	Infants, Toddlers and Twos	3	0	3

**II. Other Major Courses**

**Total Credits: 16**

***Recommended Semester Schedule*****First Year-Fall**

EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	144	Child Development I	3	0	3

**First Year-Spring**

EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	234	Infant, Toddler, & Twos	3	0	3

**Total Credits: 16**

### ***Early Childhood Administration Certificate Program (C55850)***

Title			Class/Lab/Credit		
I. Major Courses					
EDU	119	Introduction to Early Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
EDU	261	Early Childhood Administration I	3	0	3
EDU	262	Early Childhood Administration II	3	0	3

#### **II. Other Major Courses**

**Total Credits: 16**

#### ***Recommended Semester Schedule***

##### **First Year-Fall**

EDU	119	Introduction to Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
EDU	261	Early Childhood Administration I	3	0	3
EDU	262	Early Childhood Administration II	3	0	3

##### **First Year-Spring**

EDU	153	Health, Safety, and Nutrition	3	0	3
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**Total Credits: 16**

### ***Special Education Certificate Program-Early Childhood (C55220S)***

Title			Class/Lab/Credit		
<b>I. Major Courses</b>					
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	221	Children with Exceptionalities	3	0	3

#### **II. Other Major Courses**

EDU	223	Specific Learning Disabilities	3	0 3
EDU	247	Sensory-Physical Disabilities	3	0 3

**Total Credits: 18**

#### ***Recommended Semester Schedule***

##### **First Year-Fall**

EDU	144	Child Development I	3	0	3
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##### **First Year-Spring**

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3

##### **First Year-Fall**

EDU	221	Children with Exceptionalities	3	0	3
EDU	247	Sensory-Physical Disabilities	3	0	3

##### **Second Year-Spring**

EDU	223	Specific Learning Disabilities	3	0	3
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# Teaching/Training: Early Childhood Education

## Concentration: Licensure

A55220L (Associate Degree)

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers. Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children. Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
<b>Communications:</b>					
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
<b>Humanities: (select one course)</b>					
ART	111	Art Appreciation	3	0	3
MUS	110	Music Appreciation	3	0	3
PHI	215	Philosophical Issues	3	0	3
PHI	240	Introduction to Ethics	3	0	3
<b>Social Behavioral Science</b>					
PSY	150	General Psychology	3	0	3
<b>Mathematics:</b>					
MAT	143	Quantitative Literacy	2	2	3
<b>II. Major Courses</b>					
EDU	119	Intro to Early Childhood Education	4	0	4
EDU	131	Child, Family, & Community	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	153	Health, Safety & Nutrition	3	0	3
EDU	221	Children with Exceptionalities	3	0	3
EDU	234	Infants, Toddlers & Twos	3	0	3
EDU	280	Language / Literacy Experiences	3	0	3
EDU	284	Early Childhood Capstone Practice	1	9	4
<b>Child Development:</b>					
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
<b>Additional General Ed for Transfer Specialty:</b>					
<b>English Composition</b>					
ENG	112	Writing/Research in the Disciplines	3	0	3
<b>Social/Behavioral Science (select one course)</b>					
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
SOC	210	Introduction to Sociology	3	0	3

#### **Biological Science**

BIO	111	General Biology I	4	0	4
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#### **Natural Science (select one group)**

##### **Group 1**

AST	111	Descriptive Astronomy	3	0	3
AST	111A	Descriptive Astronomy Lab	1	0	1

##### **Group 2**

AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	1	0	1

##### **Group 3**

CHM	151	General Chemistry I	4	0	4
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#### **III. Concentration Courses – Birth to Kindergarten (B-K) Licensure Transfer**

EDU	216	Foundations of Education	3	0	3
EDU	250	Teacher Licensure Preparation	3	0	3

#### **IV. Other Required Courses**

ACA	122	College Transfer Success	1	0	1
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**Total: 71**

### ***Recommended Semester Schedule***

#### **First Year-Fall**

ACA	122	College Transfer Success	0	2	1
EDU	119	Introduction to Childhood Education	4	0	4
EDU	144	Child Development I	3	0	3
ENG	111	Writing & Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
or					
BIO	111	General Biology I	4	0	4

#### **First Year-Spring**

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
MAT	143	Quantitative Literacy	2	2	3
or					
BIO	111	General Biology I	4	0	4

#### **First Year-Summer**

ENG	112	Writing/Research in the Disciplines	3	0	3
PSY	150	General Psychology	3	0	3

#### **Second Year-Fall**

COM	231	Public Speaking	3	0	3
EDU	131	Child, Family, & Community	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	221	Children With Exceptionalities	3	0	3
EDU	216	Foundations of Education	3	0	3



**Second Year-Spring**

EDU	234	Infant, Toddler and Two's	3	0	3
EDU	250	Teacher Licensure Preparation	3	0	3
EDU	280	Language & Literacy Experiences	3	0	3
EDU	284	Early Childhood Practicum	1	9	4

**Second Year-Summer**

Choose from Humanities/Fine Arts pick list on page 145	3	0	3
Choose from Social/Behavioral Science pick list on page 145	3	0	3
Choose from Natural Science picklist on page 145			4

# Teaching/Training: Early Childhood Education

## Concentration: Non-Licensure

### A55220N (Associate Degree)

The Early Childhood Education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers. Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children. Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start Programs, and school-age programs.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
<b>Communications:</b>					
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
<b>Humanities: (select one course)</b>					
ART	111	Art Appreciation	3	0	3
MUS	110	Music Appreciation	3	0	3
PHI	215	Philosophical Issues	3	0	3
PHI	240	Introduction to Ethics	3	0	3
<b>Social Behavioral Science</b>					
PSY	150	General Psychology	3	0	3
<b>Mathematics:</b>					
MAT	143	Quantitative Literacy	2	2	3
<b>II. Major Courses</b>					
EDU	119	Intro to Early Childhood Education	4	0	4
EDU	131	Child, Family, & Community	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	151	Creative Activities	3	0	3
EDU	153	Health, Safety & Nutrition	3	0	3
EDU	221	Children with Exceptionalites	3	0	3
EDU	234	Infants, Toddlers & Twos	3	0	3
EDU	280	Language & Literacy Experiences	3	0	3
EDU	284	Early Childhood Capstone Practice	1	9	4
<b>Child Development:</b>					
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
<b>Additional General Ed for Transfer Specialty:</b>					
<b>English Composition</b>					
ENG	112	Writing/Research in the Disciplines	3	0	3
<b>Social/Behavioral Science (select one course)</b>					
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
HIS	111	World Civilizations I	3	0	3

HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
SOC	210	Introduction to Sociology	3	0	3

Biological Science

BIO	111	General Biology I	4	0	4
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**Natural Science (select one group)**

**Group I**

AST	111	Descriptive Astronomy	3	0	3
AST	111A	Descriptive Astronomy Lab	1	0	1

**Group 2**

AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	1	0	1

**Group 3**

CHM	151	General Chemistry I	4	0	4
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**III. Concentration Courses – Early Education Non-Licensure Transfer**

EDU	261	Early Childhood Admin I	3	0	3
EDU	262	Early Childhood Admin II	3	0	3

**V. Other Required Courses**

ACA	122	College Transfer Success	1	0	1
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**Total 71**

***Recommended Semester Schedule***

**First Year-Fall**

ACA	122	College Transfer Success	0	2	1
EDU	119	Introduction to Childhood Education	4	0	4
EDU	144	Child Development I	3	0	3
ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3
or					
BIO	111	General Biology I	4	0	4

**First Year-Spring**

EDU	145	Child Development II	3	0	3
EDU	146	Child Guidance	3	0	3
EDU	153	Health, Safety, and Nutrition	3	0	3
MAT	143	Quantitative Literacy	2	2	3
or					
BIO	111	General Biology I	4	0	4

**First Year-Summer**

ENG	112	English Composition	3	0	3
COM	231	Public Speaking	3	0	3
PSY	150	General Psychology	3	0	3

**Second Year-Fall**

EDU	131	Child, Family, & Community	3	0	3
EDU	151	Creative Activities	3	0	3

EDU	221	Children With Exceptionalities	3	0	3
EDU	261	Early Childhood Admin. I	3	0	3
EDU	262	Early Childhood Admin. II	3	0	3

#### **Second Year-Spring**

EDU	234	Infant, Toddler and Two's	3	0	3
EDU	280	Language & Literacy Experiences	3	0	3
EDU	284	Early Childhood Practicum	1	9	4

Choose from Natural Science pick list on page 145 4

#### **Second Year-Summer**

Choose from Humanities/Fine Arts pick list on page 145	3	0	3
Choose from Social/Behavioral Science pick list on page 145	3	0	3

## **Early Childhood/School-Age Child Pick List**

#### *Humanities/Fine Arts Pick List*

ART	111	Art Appreciation	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
HUM	110	Technology and Society	3	0	3
MUS	110	Music Appreciation	3	0	3

#### *Social/Behavioral Sciences Pick List*

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
SOC	210	Intro. to Sociology	3	0	3

#### *Natural Science/Mathematics Pick List*

BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
MAT	143	Quantitative Literacy	2	2	3

# Associate In Arts In Teacher Preparation

## A1010T (Associate Degree)

The Associate in Arts in Teacher Preparation degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in arts programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status.

Community college graduates must obtain a grade of “C” or better in each course and an overall GPA of at least 2.7 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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### I. General Education Requirements. 45 shc required

#### English Composition (6 semester hours)

ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3

#### Humanities/Communications (9 semester hours)

##### Take 3 credits

COM	120	Intro to Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3

##### Take 6 credits

ART	111	Art Appreciation	3	0	3
DRA	111	Theater Appreciation	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
MUS	110	Music Appreciation	3	0	3

#### Social/Behavioral Sciences (6 semester hours)

Select two courses from the following from at least two different disciplines:

ECO	251	Principles of Microeconomics	3	0	3
or					
ECO	252	Principles of Macroeconomics	3	0	3
HIS	111	World Civilizations I	3	0	3
or					
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
or					
HIS	132	American History II	3	0	3

POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

#### **Math (3-4 semester hours)**

Select one course from the following:

MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods	3	2	4
MAT	171	Precalculus Algebra	3	2	4

#### **Natural Science (4 semester hours)**

Select one course from the following:

BIO	111	General Biology I	3	3	4
CHM	151	General Chemistry I	3	3	4

### **II Additional General Education (17-18 semester hours credit required)**

#### **Other Required General Education (3 semester hours)**

SOC	225	Social Diversity	3	0	3
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An additional 14-15 SHC of courses should be selected from courses classified as general education within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university. *Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

### **III. Other Required Hours (15 semester hours credit)**

The following courses are required:

EDU	187	Teaching and Learning for All	3	3	4
EDU	216	Foundations of Education	3	0	3
EDU	250	Teacher Licensure Preparation	3	0	3
EDU	279	Literacy Development and Instruction	3	3	4

*\*Students who have completed Teacher Cadet or Teaching as a Profession courses in high school with a B or better may substitute that course for EDU 187 Teaching and Learning for All.*

### **IV. Academic Transition (1 semester hour credit)**

ACA	122	College Transfer Success	1	0	1
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**Total Credits: 60-61**

### ***Recommended Semester Schedule***

#### **First Year-Fall**

ACA	122	College Transfer Success	1	0	1
EDU	187	Teaching and Learning for All	3	3	4
ENG	111	Writing and Inquiry	3	0	3

Select one course from the following:

MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods	3	2	4
MAT	171	Precalculus Algebra	3	2	4
		General Education Elective	3	0	3

#### **First Year-Spring**

COM	120	Intro to Interpersonal Communication	3	0	3
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or

COM	231	Public Speaking	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
		General Education Elective	3	0	3
		Humanities/Fine Arts Elective	3	0	3
		Social Science Elective	3	0	3

#### **First Year-Summer**

		Humanities/Fine Arts Elective	3	0	3
		Social Science Elective	3	0	3

#### **Second Year-Fall**

BIO	111	General Biology I	3	3	4
SOC	225	Social Diversity	3	0	3
EDU	216	Foundations of Education	3	0	3
		General Education Elective	3	0	3

#### **Second Year-Spring**

EDU	250	Teacher Licensure Preparation	3	0	3
EDU	279	Literacy Development and Instruction	3	3	4
		General Education Elective	3	0	3
		General Education Elective	3	0	3



# Associate In Science In Teacher Preparation

## A1040T (Associate Degree)

The Associate in Science in Teacher Preparation degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use.

The Comprehensive Articulation Agreement (CAA) and the Independent Comprehensive Articulation Agreement (ICAA) enables North Carolina community college graduates of two-year associate in science programs who are admitted to constituent institutions of The University of North Carolina and to Signatory Institutions of North Carolina Independent Colleges and Universities to transfer with junior status.

Community college graduates must obtain a grade of “C” or better in each course and an overall GPA of at least 2.7 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
-------	------------------

### I. General Education Requirements. 45 shc required

#### English Composition (6 semester hours)

ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3

#### Humanities/Communications (6 semester hours)

##### Take 3 credits

COM	120	Intro to Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3

##### Take 3 credits

ART	111	Art Appreciation	3	0	3
DRA	111	Theater Appreciation	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
MUS	110	Music Appreciation	3	0	3

#### Social/Behavioral Sciences (3 semester hours)

ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

**Math (8 semester hours)**

Select two courses from the following:

MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4

**Natural Science (8 semester hours)**

Select two courses from the following:

BIO	111	General Biology I	3	3	4
and					
BIO	112	General Biology II	3	3	4

or

CHM	151	General Chemistry I	3	3	4
and					
CHM	152	General Chemistry II	3	3	4

**II Additional General Education (17-18 semester hours credit required)****Other Required General Education (3 semester hours)**

SOC	225	Social Diversity	3	0	3
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An additional 11-12 SHC of courses should be selected from courses classified as general education within the Comprehensive Articulation Agreement. Students should select these courses based on their intended major and transfer university. *Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution.*

**III. Other Required Hours (15 semester hours credit)**

The following courses are required:

EDU	187	Teaching and Learning for All	3	3	4
EDU	216	Foundations of Education	3	0	3
EDU	250	Teacher Licensure Preparation	3	0	3
EDU	279	Literacy Development and Instruction	3	3	4

*\*Students who have completed Teacher Cadet or Teaching as a Profession courses in high school with a B or better may substitute that course for EDU 187 Teaching and Learning for All.*

**IV. Academic Transition (1 semester hour credit)**

ACA	122	College Transfer Success	1	0	1
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**Total Credits: 60-61*****Recommended Semester Schedule*****First Year-Fall**

ACA	122	College Transfer Success	1	0	1
EDU	187	Teaching and Learning for All	3	3	4
ENG	111	Writing and Inquiry	3	0	3
MAT	171	Precalculus Algebra	3	2	4
or					
MAT	271	Calculus I	3	2	4

**First Year-Spring**

COM	120	Intro to Interpersonal Communication	3	0	3
or					
COM	231	Public Speaking	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3

MAT	172	Precalculus Trigonometry	3	2	4
or					
MAT	271	Calculus I	3	2	4
Humanities/Fine Arts Elective			3	0	3
Social Science Elective			3	0	3

#### **First Year-Summer**

General Education Elective			3	0	3
General Education Elective			3	0	3

#### **Second Year-Fall**

BIO	111	General Biology I	3	3	4
or					
CHM	151	General Chemistry I	3	3	4
SOC	225	Social Diversity	3	0	3
EDU	216	Foundations of Education	3	0	3
General Education Elective			3	0	3

#### **Second Year-Spring**

BIO	112	General Biology II	3	3	4
or					
CHM	152	General Chemistry II	3	3	4
EDU	250	Teacher Licensure Preparation	3	0	3
EDU	279	Literacy Development and Instruction	3	3	4
General Education Elective			3	0	3

# Electrical Systems Technology

A35130 (Associate Degree) D35130 (Diploma)

This curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities.

Coursework, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, digital electronics, programmable logic controllers, industrial motor controls, the National Electric Code and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical/electronics field as an on-the-job trainee or apprentice, assisting in the layout, installation and maintenance of electrical/electronics systems.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## Associate Degree Program

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
*MAT	121	Algebra/Trigonometry I	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences					

\*Students planning to pursue a Bachelor's degree should take MAT 171, 171A, MAT 172, MAT 172A and MAT 271.

## II. Major Courses

ELC	113	Residential Wiring	2	6	4
ELC	128	Introduction to PLC	2	3	3
ELC	131	Circuit Analysis I	3	3	4
ELC	131A	Circuit Analysis I Lab	0	3	1
ELN	231	Industrial Controls	2	3	3

## III. Concentration

ELC	115	Industrial Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
ELC	119	NEC Calculations	1	2	2
ELC	213	Instrumentation	3	2	4

## IV. Other Major Courses Select 26 credits

Take 3 credits

WBL	120	Career Readiness/Explore/Employ.	2	3	3
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Take 23 credits

EGR	125	Applied Software for Technology	1	2	2
ELN	133	Digital Electronics	3	3	4
ELN	233	Microprocessor Fundamentals	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	112	Industrial Safety	2	0	2
PCI	264	Process Control with PLC's	3	3	4
PHY	131	Physics-Mechanics	3	2	4
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4

WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

#### V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 69**

### *Recommended Semester Schedule*

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
EGR	125	Appl. Software for Technology	1	2	2
ELC	131	Circuit Analysis I	3	3	4
ELC	131A	Circuit Analysis I Lab	0	3	1
ELN	133	Digital Electronics	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	112	Industrial Safety	2	0	2

#### **First Year-Spring**

COM	231	Public Speaking	3	0	3
ELC	128	Introduction to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3
ENG	111	Writing and Inquiry	3	0	3
WBL	120	Career Readiness/Explore/Employ.	2	3	3

#### **First Year-Summer**

MAT	121	Algebra/Trigonometry I	2	2	3
Humanities/FA Elective-See list on page 76			3	0	3
Social Sciences Elective-See list on page 76			3	0	3

#### **Second Year-Fall**

ELC	113	Residential Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
ELC	119	NEC Calculations	1	2	2
ELC	213	Instrumentation	3	2	4
PCI	264	Process Control with PLC's	3	3	4

#### **Second Year-Spring**

ELC	115	Industrial Wiring	2	6	4
ELN	233	Microprocessor Fundamentals	3	3	4
PHY	131	Physics-Mechanics	3	2	4

**Note:** WBL 111, 112, 113, 114, 121, 122, 123, 124, 131, 132, 133, 134, 211, 212, 213, 214 may count for any of the following:  
EGR 125, ELN 133, HYD 110, ISC 112, PCI 264, ELN 233, PHY 131

## *Diploma Program (D35130)*

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3
II. Major Courses					
ELC	113	Residential Wiring	2	6	4
ELC	128	Introduction to PLC	2	3	3
ELC	131	Circuit Analysis I	3	3	4
ELC	131A	Circuit Analysis I Lab	0	3	1
ELN	231	Industrial Controls	2	3	3
III. Concentration					
ELC	115	Industrial Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
IV. Other Major Courses					
Take 3 credits					
WBL	120	Career Readiness/Explore/Employ.	2	3	3
Take 8 credits					
EGR	125	Applied Software for Technology	1	2	2
ELN	133	Digital Electronics	3	3	4
ISC	112	Industrial Safety	2	0	2
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4
IV. Other Required Courses					
ACA	115	Success and Study Skills	0	2	1
Total Credits: 39					

## *Recommended Semester Schedule*

### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
EGR	125	Appl. Software for Technology	1	2	2
ELC	118	National Electric Code	1	2	2
ELN	133	Digital Electronics	3	3	4
ISC	112	Industrial Safety	2	0	2

**First Year-Spring**

ELC	115	Industrial Wiring	2	6	4
ELC	128	Introduction to PLC	2	3	3
ELN	231	Industrial Controls	2	3	3

**First Year-Summer**

ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3

**Second Year-Fall**

ELC	113	Residential Wiring	2	6	4
ELC	131	Circuit Analysis I	3	3	4
ELC	131A	Circuit Analysis I Lab	0	3	1
WBL	120	Career Readiness/Explore/Employ.	2	3	3



# Emergency Management

A55460 (Associate) C55460C (Certificate) C55460E (Certificate) C55460F (Certificate)

The Emergency Management curriculum is designed to provide students with a foundation of technical and professional knowledge needed for emergency services delivery in local and state government agencies. Study involves both management and technical aspects of law enforcement, fire protection, emergency medical services, and emergency planning.

Course work includes classroom and laboratory exercises to introduce the student to various aspects of emergency preparedness, protection, and enforcement. Students will learn technical and administrative skills such as investigative principles, hazardous materials, codes, standards, emergency agency operations, and finance.

Employment opportunities include ambulance services, fire/rescue agencies, law enforcement agencies, fire marshal offices, industrial firms, educational institutions, emergency management offices, and other government agencies. Employed persons should have opportunities for skilled and supervisory-level positions

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
-------	------------------

## I. General Education

### Minimum 15 hours:

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

## II. Core

### Required Courses (27 Hours)

EPT	120	Sociology of Disaster	3	0	3
EPT	130	Mitigation & Preparedness	3	0	3
EPT	140	Emergency Management	3	0	3
EPT	210	Response & Recovery	3	0	3
EPT	220	Terrorism & Emer. Mgt	3	0	3
EPT	275	Emergency OPS Center Mgt	3	0	3
FIP	228	Local Gov't Finance	3	0	3

### Incident Management.

EPT	150	Incident Management	3	0	3
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### Law and Ethics.

EPT	124	EM Services Law & Ethics	3	0	3
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## III. Other Major Hours

Take 27 hours from the following list (with no more than 9 hours per prefix):

BUS	135	Principles of Supervision	3	0	3
CIS	110	Introduction to Computers	2	2	3
CJC	111	Intro to Criminal Justice	3	0	3
CJC	112	Criminology	3	0	3
CJC	120	Interviews/Interrogations	1	2	2
CJC	121	Law Enforcement Operations	3	0	3
CJC	122	Community Policing	3	0	3
CJC	131	Criminal Law	3	0	3
CJC	132	Court Procedure & Evidence	3	0	3
CJC	141	Corrections	3	0	3
CJC	160	Terrorism: Underlying Issues	3	0	3

CJC	161	Intro to Homeland Security	3	0	3
CJC	212	Ethics & Comm Relations	3	0	3
CJC	231	Constitutional Law	3	0	3
CJC	232	Civil Liability	3	0	3
EMS	110	EMT	6	6	9
FIP	110	Fire Prot/Rest & Hotels	1	0	1
FIP	120	Intro to Fire Protection	3	0	3
FIP	124	Fire Prevention & Public Ed	3	0	3
FIP	132	Building Construction	3	0	3
FIP	146	Fire Protection Systems	3	2	4
FIP	162	Firefighter Safety & Wellness	3	0	3
FIP	176	HazMat: Operations	4	0	4
FIP	180	Wildland Fire Behavior	3	0	3
FIP	184	Wildland Fire Safety	3	0	3
FIP	220	Fire Fighting Strategies	3	0	3
FIP	229	Fire Dynamics and Combust	3	0	3
FIP	232	Hydraulics & Water Dist	2	2	3
POL	130	State and Local Government	3	0	3

#### IV. Other Required Courses

ACA	115	Success & Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
ACA	220	Professional Transition	1	0	1

**Total Credits: 71**

#### *Recommended Semester Schedule*

##### **First Year-Fall**

ACA	115	Success & Study Skills	0	2	1
or					
ACA	122	College Transfer Success	0	2	1
CIS	110	Introduction to Computers	2	2	3
ENG	111	Writing and Inquiry	3	0	3
EPT	120	Sociology of Disaster	3	0	3
EPT	140	Emergency Management	3	0	3
FIP	120	Intro to Fire Protection	3	0	3

##### **First Year-Spring**

COM	231	Public Speaking	3	0	3
EPT	130	Mitigation & Preparedness	3	0	3
EPT	150	Incident Management	3	0	3

Choose 6 credits from CJC, FIP, EPT, EMS, BUS

##### **First Year-Summer**

ACA	220	Professional Transition	1	0	1
MAT	143	Quantitative Literacy	3	0	3
SOC	210	Introduction to Sociology	3	0	3

Humanities Elective-see list on page 75

##### **Second Year-Fall**

EPT	124	EM Services Law & Ethics	3	0	3
EPT	210	Response & Recovery	3	0	3
EPT	220	Terrorism & Emer. Mgt	3	0	3
POL	130	State and Local Government	3	0	3
FIP	228	Local Government Finance	3	0	3

**Second Year-Spring**

CJC	111	Intro to Criminal Justice*	3	0	3
CJC	132	Court Procedure & Evidence	3	0	3
EPT	275	Emergency OPS Center Mgt	3	0	3
Choose 6 credits from CJC, FIP, EPT, EMS, BUS					

***Emergency Management-Criminal Justice Certificate (C55460C)***

Title	Class/Lab/Credit				
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**I. Other Major Courses**

CJC	111	Intro to Criminal Justice	3	0	3
CJC	131	Criminal Law	3	0	3
CJC	132	Court Procedure & Evidence	3	0	3
CJC	231	Constitutional Law	3	0	3

**II. Other Required Courses**

ACA	115	Success & Study Skills	0	2	1
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**Total Credits: 13*****Recommended Semester Schedule*****First Year-Fall**

CJC	111	Intro to Criminal Justice	3	0	3
CJC	131	Criminal Law	3	0	3

**First Year-Spring**

ACA	115	Success & Study Skills	0	2	1
CJC	132	Court Procedure & Evidence	3	0	3
CJC	231	Constitutional Law	3	0	3

***Emergency Management Certificate (C55460E)***

Title	Class/Lab/Credit				
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**I. Major Courses**

EPT	130	Mitigation & Preparedness	3	0	3
EPT	140	Emergency Management	3	0	3

**II. Other Major Courses**

EMS	110	EMT	6	6	9
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**IV. Other Required Courses**

ACA	115	Success & Study Skills	0	2	1
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**Total Credits: 16*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success & Study Skills	0	2	1
EMS	110AB	EMT (Emerg. Med. Technician)			4
EPT	130	Mitigation & Preparedness	3	0	3
EPT	140	Emergency Management	3	0	3

**First Year-Spring**

EMS	110AB	EMT (Emerg. Med. Technician)			5
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### ***Emergency Management-Fire Technology Certificate (C55460F)***

Title	Class/Lab/Credit
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#### **I. Other Major Courses**

FIP	120	Intro to Fire Protection	3	0	3
FIP	124	Fire Prevention & Public Ed	3	0	3
FIP	132	Building Construction	3	0	3
FIP	162	Firefighter Safety & Wellness	3	0	3
FIP	228	Local Government Finance	3	0	3

#### **II. Other Required Courses**

ACA	115	Success & Study Skills	0	2	1
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**Total Credits: 16**

### ***Recommended Semester Schedule***

#### **First Year-Fall**

ACA	115	Success & Study Skills	0	2	1
FIP	120	Intro to Fire Protection	3	0	3
FIP	132	Building Construction	3	0	3

#### **First Year-Spring**

FIP	124	Fire Prevention & Public Ed	3	0	3
FIP	162	Firefighter Safety & Wellness	3	0	3
FIP	228	Local Government Finance	3	0	3

# Emergency Medical Science

A45340 (Associate Degree) C45340 (Certificate)

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce. Students will gain complex knowledge, competency, and experience while employing evidence based practice under medical oversight, and serve as a link from the scene into the healthcare system. Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

<b>I. General Education Courses</b>		Class	Lab	Clinical	Credit
ENG-111	Writing and Inquiry	3	0	0	3
ENG-112	Research & Writing	3	0	0	3
BIO- 168	Anatomy & Physiology I	3	3	0	4

## **Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences:**

Humanities: HUM-115 Critical Thinking; HUM-122 Southern Culture; or ART-111 Art Appreciation  
Social/Behavioral Science: PSY-150 General Psychology or SOC-210 Introduction to Sociology

<b>II. Major Courses</b>					
EMS-110	EMT	6	6	3	9
BIO-169	Anatomy & Physiology II	3	3	0	4

III.	Required Subject Area					
EMS-122	EMS Clinical Practicum I	0	0	3	1	
EMS-130	Pharmacology	3	3	0	4	
EMS-131	Advanced Airway Management	1	2	0	2	
EMS-160	Cardiology I	2	3	0	3	
EMS-220	Cardiology II	2	3	0	3	
EMS-221	EMS Clinical Practicum II	0	0	6	2	
EMS-231	EMS Clinical Practicum III		0	0	9	3
EMS-240	Patients with Special Challenges	1	2	0	2	
EMS-241	EMS Clinical Practicum IV		0	0	12	4
EMS-250	Medical Emergencies	3	3	0	4	
EMS-260	Trauma Emergencies	1	3	0	2	
EMS-270	Life Span Emergencies	3	3	0	4	
EMS-285	EMS Capstone	1	3	0	2	

<b>IV. Other Major Courses</b>					
EMS-235	EMS Management	2	0	0	2
MED-121	Medical Terminology I	3	0	0	3
MED-122	Medical Terminology II	3	0	0	3

<b>V. Other Required Courses</b>					
ACA-115	Success and Study Skills	0	2	0	1

**Total Credits: 74**

## ***Recommended Semester Schedule***

### **First Year Fall**

ACA 115	Success and Study Skills	0	2	0	1
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BIO-168	Anatomy & Physiology I	3	3	0	4
EMS-110	EMT	6	6	3	9
MED 121	Medical Terminology I	3	0	0	3

#### **First Year Spring**

BIO-169	Anatomy & Physiology II	3	3	0	4
MED 122	Medical Terminology II	3	0	0	3
EMS-122	EMS Clinical Practicum	0	0	3	1
EMS-130	Pharmacology	3	3	0	4
EMS-131	Advanced Airway Management	1	2	0	2
EMS-160	Cardiology I	2	3	0	3

#### **First Year Summer**

EMS-220	Cardiology II	2	3	0	3
EMS-221	Clinical Practicum II	0	0	6	2
EMS-270	Life Span Emergencies	3	3	0	4
ENG-111	Writing and Inquiry	3	0	0	3

#### **Second Year Fall**

EMS-231	Clinical Practicum III	0	0	9	3
EMS-250	Medical Emergencies	3	3	0	4
EMS-260	Trauma Emergencies	1	3	0	2
ENG-112	Research & Writing	3	0	0	3
PSY/SOC	PSY 150 /SOC 210 only	3	0	0	3

#### **Second Year Spring**

EMS-235	EMS Management	2	0	0	2
EMS-240	Patients w/Special Challenges	1	2	0	2
EMS-241	Clinical Practicum IV	0	0	12	4
EMS-285	EMS Capstone	1	3	0	2
HUM/ART	Humanities/Art elective from page 75	3	0	0	3

### ***Emergency Medical Science Certificate (C45340)***

#### **I. Major Courses**

EMS-110	EMT	6	6	3	9
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#### **II. Other Major Courses**

EMS-235	EMS Management	2	0	0	2
MED-121	Medical Terminology I	3	0	0	3
MED-122	Medical Terminology II	3	0	0	3
ACA-115	Success and Study Skills	0	2	0	1

**Total Credits: 18**

### ***Recommended Semester Schedule***

#### **First Year Fall**

EMS-110	EMT	6	6	3	9
MED-121	Medical Terminology I	3	0	0	3
ACA-115	Success and Study Skills	0	2	0	1

#### **First Year Spring**

EMS-235	EMS Management	2	0	0	2
MED-122	Medical Terminology II	3	0	0	3

# Emergency Medical Science Bridge Program

A45340BR (Associate Degree Bridge Program)

The Emergency Medical Science bridge program has been established for students that have completed portions of their EMS requirements through NC Community College Continuing Education program. Currently credentialed Paramedics would receive 45 semester hours of credit toward the AAS degree. The remaining course work to complete the degree will require 29 additional semester hours of work outlined below.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Once the student has been accepted into the bridge program, the student will receive credit for the following courses:

EMS-110	EMT	6	6	3	9	
EMS-122	EMS Clinical Practicum I	0	0	3	1	
EMS-130	Pharmacology	3	3	0	4	
EMS-131	Advanced Airway Management	1	2	0	2	
EMS-160	Cardiology I	2	3	0	3	
EMS-220	Cardiology II	2	3	0	3	
EMS-221	EMS Clinical Practicum II	0	0	6	2	
EMS-231	EMS Clinical Practicum III		0	0	9	3
EMS-240	Patients with Special Challenges	1	2	0	2	
EMS-241	EMS Clinical Practicum IV		0	0	12	4
EMS-250	Medical Emergencies	3	3	0	4	
EMS-260	Trauma Emergencies	1	3	0	2	
EMS-270	Life Span Emergencies	3	3	0	4	
EMS-285	EMS Capstone	1	3	0	2	

**Total Credits: 45**

## Required Courses to complete the bridge program:

I. General Education Courses		Class	Lab	Clinical	Credit
ENG-111	Writing and Inquiry	3	0	0	3
ENG-112	Research & Writing	3	0	0	3
BIO-168	Anatomy & Physiology I	3	3	0	4

## Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences:

Humanities: HUM-115 Critical Thinking; HUM-122 Southern Culture; or ART-111 Art Appreciation  
Social/Behavioral Science: PSY-150 General Psychology or SOC-210 Introduction to Sociology

## II. Major Courses

BIO-169	Anatomy & Physiology II	3	3	0	4
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## III. Other Major Courses

EMS-235	EMS Management	2	0	0	2
MED-121	Medical Terminology I	3	0	0	3
MED-122	Medical Terminology II	3	0	0	3

**Total Credits: 28**

**Program total: 73**

## Recommended Semester Schedule

### First Year Fall

ENG-111	Writing and Inquiry	3	0	0	3
BIO-168	Anatomy & Physiology I	3	3	0	4



MED-121	Medical Terminology I	3	0	0	3
PSY 150	General Psychology	3	0	0	3
or					
SOC 210	Introduction to Sociology	3	0	0	3

**First Year Spring**

EMS-235	EMS Management	2	0	0	2
ENG-112	Research & Writing	3	0	0	3
BIO-169	Anatomy & Physiology II	3	3	0	4
MED-122	Medical Terminology II	3	0	0	3
Humanities Elective: Select from pick list on page 75		3	0	0	3

# Associate in Engineering

## A10500 (Associate Degree)

This program is designed to promote educational advancement opportunities for Associate in Engineering degree completers moving between the NC community colleges and the constituent institutions of The University of North Carolina in order to complete Bachelor of Science in Engineering degrees. The student may complete course work equivalent to the first two years of study required for a bachelor's degree. Unless otherwise indicated, classes in this program satisfy the articulation agreement with colleges in the University of North Carolina System and are eligible for transfer to four-year degree programs, provided all other requirements for transfer are satisfied.

The Associate in Engineering degree (A.E.) is awarded upon completion of program requirements. Graduates usually transfer to a senior institution with junior status. Follow up studies show that community college transfer students are generally successful in their studies at senior institutions.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

### UNIVERSAL GENERAL EDUCATION TRANSFER COMPONENT (45-46 SHC)

Title			Class/Lab/Credit		
English Composition					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanities: Choose One					
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
Fine Arts and Communications: Choose One					
COM	231	Public Speaking	3	0	3
ART	111	Art Appreciation	3	0	3
MUS	110	Music Appreciation	3	0	3
Social/Behavioral Sciences					
ECO	251	Principles of Microeconomics	3	0	3
Choose One:					
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3
Mathematics					
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
Natural Sciences					
CHM	151	General Chemistry I	3	3	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II		3	3

4

**Other General Education****Choose One:**

BIO	111	General Biology I	3	3	4
CHM	152	General Chemistry II	3	3	4
COM	110	Introduction to Communication	3	0	3
COM	231	Public Speaking	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
HUM	110	Technology and Society	3	0	3

**OTHER REQUIRED HOURS (15-16 SHC)****Local MTCC Requirements (5 semester hours)****Must be completed within first 30 hours of enrollment.**

ACA 122	College Transfer Success	0	2	1
EGR 150	Introduction to Engineering	1	2	2
PED 110	Fitness and Wellness for Life	1	2	2

**Other General Education and Pre-major Electives (10-11 SHC)**

Select 10-11 SHC of courses from the following courses classified as pre-major, elective, or general education courses within the Comprehensive Articulation Agreement. *(Students must meet the receiving university's foreign language and/or health and physical education requirements, if applicable, prior to or after transfer to the senior institution. Students should choose courses appropriate to the specific university and engineering major requirements.)*

BIO	111	General Biology I	3	3	4
CHM	152	General Chemistry II	3	3	4
COM	110	Introduction to Communication	3	0	3
COM	231	Public Speaking	3	0	3
CSC	134	C++ Programming	2	3	3
CSC	151	JAVA Programming	2	3	3
DFT	170	Engineering Graphics	2	2	3
ECO	252	Principles of Macroeconomics	3	0	3
EGR	220	Engineering Statics	3	0	3
HUM	110	Technology and Society	3	0	3
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3

**Total Semester Hours Credit (SHC) in Program: 60 – 61**

***Recommended Semester Schedule***  
**(2 year plan if starting with MAT 271 Calculus I)**

**First Year-Fall**

ACA	122	College Transfer Success	0	2	1
MAT	271	Calculus I	3	2	4
ENG	111	Writing and Inquiry	3	0	3
CHM	151	General Chemistry I	3	3	4
ECO	251	Principles of Microeconomics	3	0	3

**First Year-Spring**

MAT	272	Calculus II	3	2	4
ENG	112	Writing/Research in the Disciplines	3	0	3
EGR	150	Introduction to Engineering	1	2	2
PED	110	Fitness and Wellness for Life	1	2	2
Pre-Major Engineering Elective					3 or 4
Fine Arts and Communication Requirement			3	0	3

**Second Year-Fall**

MAT	273	Calculus III	3	2	4
PHY	251	General Physics I	3	3	4
Engineering Pre-Major Elective					3 or 4
Humanities Requirement			3	0	3
General Education Requirement					3 or 4

**Second Year-Spring**

PHY	252	General Physics II	3	3	4
Social Science Elective			3	0	3
Engineering Pre-Major Elective					3 or 4
Engineering Pre-Major Elective					3 or 4

# General Education

A10300 (Associate Degree)

The Associate in General Education is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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## I. General Education Courses 15 shc required

### English Composition 6 shc

ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3

### Humanities/Fine Arts

#### Take 3 credits

ART	111	Art Appreciation	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	273	African-American Literature	3	0	3
HUM	110	Technology and Society	3	0	3
HUM	122	Southern Culture	2	2	3

### Social/Behavioral Sciences

#### Take 3 credits

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3

### Natural Science/Mathematics

#### Take 3 credits

MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4

## II. Major Courses

### A. Core

1. Required Courses
2. Required Subject Areas

**B. Concentration****C. Other Major Courses****III. Other Required Courses**

After meeting program requirements, electives may be selected from the following approved courses: (Choose 49-50 shc.) 3 shc must be CIS 110.

**Computer Science 3 shc**

CIS	110	Introduction to Computers	2	2	3
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**Health/Physical Education**

HEA	110	Personal Health/Wellness	3	0	3
PED	110	Fit and Well For Life	1	2	2
PED	111	Physical Fitness	0	3	1
PED	113	Aerobics I	0	3	1
PED	117	Weight Training	0	3	1
PED	120	Walking For Fitness	0	3	1
PED	130	Tennis-Beginning	0	2	1
PED	128	Golf-Beginning	0	2	1
PED	139	Bowling-Beginning	0	2	1
PED	152	Swimming-Beginning	0	2	1
PED	155	Water Aerobics	0	3	1
PED	174	Wilderness Pursuits	0	2	1
PED	219	Disc Golf	0	2	1

**Humanities/Fine Arts**

ART	111	Art Appreciation	3	0	3
ART	121	Two-Dimensional Design	0	6	3
ART	171	Digital Design I	0	6	3
ART	275	Introduction to Graphic Design	0	6	3
COM	110	Introduction to Communications	3	0	3
COM	120	Intro. to Interpersonal Communications		3	0
COM	231	Public Speaking	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
ENG	273	African-American Literature	3	0	3
FRE	111	Elementary French I*	3	0	3
FRE	112	Elementary French II*	3	0	3
HUM	110	Technology and Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	122	Southern Culture	3	0	3
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Introduction to Ethics	3	0	3
REL	110	World Religion	3	0	3
REL	211	Introduction to Old Testament	3	0	3
REL	212	Introduction to New Testament	3	0	3
SPA	111	Elementary Spanish I	4	0	4
SPA	112	Elementary Spanish II	4	0	4
SPA	181	Spanish Lab I	0	2	1
SPA	182	Spanish Lab II	0	2	1

SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3
SPA	281	Spanish Lab III	0	2	1
SPA	282	Spanish Lab IV	0	2	1

#### **Social/Behavioral Sciences**

ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
POL	120	American Government	3	0	3
POL	130	State and Local Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	150	General Psychology	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	241	Developmental Psychology	3	0	3
PSY	281	Abnormal Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	242	Sociology of Deviance	3	0	3

#### **Natural Science**

AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
BIO	155	Nutrition	3	0	3
BIO	163	Basic Anatomy and Physiology	4	2	5
BIO	168	Anatomy and Physiology I	3	3	4
BIO	169	Anatomy and Physiology II	3	3	4
BIO	175	General Microbiology	2	2	3
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
BIO	275	Microbiology	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
GEL	111	Geology	3	2	4
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4

#### **Mathematics**

MAT	143	Quantitative Literacy	2	2	3
MAT	152	Statistical Methods I	3	2	4
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4



MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MAT	280	Linear Algebra	2	2	3
MAT	285	Differential Equations	2	2	3

*Students must meet the receiving university's foreign language and/or health and physical education requirements either before or after transfer to the senior institution.*

#### Other Electives

ACA	115	Success & Study Skills	0	2	1	
ACA	122	College Transfer Success	1	0	1	
ACC	120	Principles of Financial Accounting	3	2	4	
ACC	121	Principles of Managerial Accounting	3	2	4	
ASL	111	Elementary ASL I	3	0	3	
ASL	112	Elementary ASL II	3	0	3	
ASL	181	ASL Lab I	0	2	1	
ASL	182	ASL Lab II	0	2	1	
BUS	110	Introduction to Business	3	0	3	
BUS	115	Business Law	3	0	3	
BUS	137	Principles of Management	3	0	3	
CIS	111	Basic PC Literacy	1	2	2	
CIS	115	Introduction to Programming and Logic		2	2	3
CSC	134	C++ Programming	2	3	3	
CSC	151	JAVA Programming	2	3	3	
CTS	115	Information Systems Business Concepts		3	0	3
EGR	150	Intro. to Engineering	1	2	2	
EGR	220	Engineering Statistics	3	0	3	
MED	121	Medical Terminology I	3	0	3	
MED	122	Medical Terminology II	3	0	3	
NAS	101	Nursing Assistant I	3	2	3	5
NAS	102	Nursing Assistant II	3	2	6	6
NAS	103	Nursing Assistant III	2	0	0	2
NUT	110	Nutrition	3	0	0	3

**Total Credits: 64-66**

# Associate in General Education Nursing

## A1030N (Associate Degree)

The Associate in General Education (AGE)-Nursing is designed for students who wish to begin their study toward the Associate in Nursing degree and a Baccalaureate degree in Nursing as based on Blocks 1 through 3 of the Uniform Articulation Agreement between the University of North Carolina's Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) programs and the North Carolina Community College Associate Degree Nursing Programs which was approved by the State Board of Community Colleges and the UNC Board of Governors in February 2015. The AGE-Nursing shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses.

A student who completes an Associate in Applied Science (AAS) in Nursing with a GPA of at least 2.0 and a grade of C or better in the AGE-Nursing courses listed below and who holds a current unrestricted license as a Registered Nurse in North Carolina will have fulfilled the UNC institutions lower-division general education requirements as well as nursing program entry requirements. However, because nursing program admissions are competitive, no student is guaranteed admission to the program of his or her choice.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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### I. General Education Courses 15 shc required

#### English Composition (6 semester hours)

ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3

#### Humanities/Communications (9 semester hours)

##### Take 2 Groups/ Take 6 credits

ART	111	Art Appreciation	3	0	3
ART	114	Art History Survey I	3	0	3
ART	115	Art History Survey II	3	0	3
HUM	115	Critical Thinking	3	0	3
MUS	110	Music Appreciation	3	0	3
MUS	112	Introduction to Jazz	3	0	3
PHI	215	Philosophical Issues	3	0	3
PHI	240	Introduction to Ethics	3	0	3

##### Take 3 credits

ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3

#### Social/Behavioral Sciences (9 semester hours)

##### Take 3 Groups

PSY	150	General Psychology	3	0	3
PSY	241	Developmental Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

##### Take 3 credits

SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SOC	225	Social Diversity	3	0	3
SOC	230	Race and Ethnic Relations	3	0	3
SOC	240	Social Psychology	3	0	3

**Take 3 credits**

HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3

**Natural Science****Take 8 credits**

BIO	168	Anatomy and Physiology	3	3	4
BIO	169	Anatomy and Physiology	3	3	4

**Take 3 credits**

BIO	175	General Microbiology	2	2	3
BIO	275	Microbiology	3	3	4

**Take 1 of 2 Groups**

CHM	151	General Chemistry I	3	3	4
or					
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1

**Math****Take 4 credits**

MAT	152	Statistical Methods I	3	2	4
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**Take 3 credits**

MAT	143	Quantitative Literacy	2	2	3
MAT	171	Pre-Calculus	3	2	4

**II. Other Required Courses**

ACA	122	College Transfer Success	0	2	1
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**III. Additional General Education****Take 7 credits**

ART	111	Art Appreciation	3	0	3
AST	151	General Astronomy I	3	0	3
AST	151A	General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST	152A	General Astronomy II Lab	0	2	1
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM	131A	Introduction to Chemistry Lab	0	3	1
CHM	132	Organic and Biochemistry	3	3	4
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
CIS	110	Introduction to Computers	2	2	3
CIS	115	Introduction to Programming and Logic		2	3
COM	110	Introduction to Communication	3	0	3
COM	120	Introduction to Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3
DRA	111	Theatre Appreciation	3	0	3
DRA	126	Storytelling	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
ENG	114	Professional Research and Reporting	3	0	3

ENG	231	American Literature I	3	0	3
ENG	232	American Literature II	3	0	3
ENG	241	British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
FRE	111	Elementary French I	3	0	3
FRE	112	Elementary French II	3	0	3
HIS	111	World Civilizations I	3	0	3
HIS	112	World Civilizations II	3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
HUM	110	Technology and Society	3	0	3
HUM	115	Critical Thinking	3	0	3
HUM	120	Cultural Studies	3	0	3
HUM	122	Southern Culture	3	0	3
MAT	143	Quantitative Literacy	2	2	3
MAT	171	Precalculus Algebra	3	2	4
MAT	172	Precalculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
MAT	272	Calculus II	3	2	4
MAT	273	Calculus III	3	2	4
MUS	110	Music Appreciation	3	0	3
MUS	210	History of Rock Music	3	0	3
PHI	210	History of Philosophy	3	0	3
PHI	240	Introduction to Ethics	3	0	3
PHY	110	Conceptual Physics	3	0	3
PHY	110A	Conceptual Physics Lab	0	2	1
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
PHY	251	General Physics I	3	3	4
PHY	252	General Physics II	3	3	4
POL	120	American Government	3	0	3
POL	210	Comparative Government	3	0	3
PSY	239	Psychology of Personality	3	0	3
PSY	281	Abnormal Psychology	3	0	3
REL	110	World Religion	3	0	3
REL	211	Introduction to Old Testament	3	0	3
REL	212	Introduction to New Testament	3	0	3
SOC	213	Sociology of the Family	3	0	3
SOC	220	Social Problems	3	0	3
SPA	111	Elementary Spanish I	3	0	3
SPA	112	Elementary Spanish II	3	0	3
SPA	211	Intermediate Spanish I	3	0	3
SPA	212	Intermediate Spanish II	3	0	3

**Total Credits: 60**

# General Occupational Technology (GOT)

A55280 (Associate of Applied Science Degree)

## Curriculum Description:

The General Occupational Technology (GOT) curriculum provides individuals with the opportunity to upgrade their skills and earn an associate degree by taking courses that offer specific job knowledge and skills.

The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be developed from any non-developmental level courses from approved curriculum programs of study offered by MTCC.

Graduates will become more effective and diverse workers, better qualified for advancements within their field of employment and better equipped for a wide range of entry-level employment opportunities.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

**\*\*All courses included in the individualized GOT curriculum must be taken from approved associate of applied science, diploma or certificate programs.**

Title	Credit
<b>General Education Requirements:</b>	
A.A.S. General Education Core:	15 semester credit hours

## Communication

A.A.S. programs must contain a minimum of 6 credit hours(two courses) in communications. Students may choose from the following:

ENG	111	Writing and Inquiry	3
ENG	112	Writing/Research in the Disciplines	3
COM	110	Introduction to Communication	3
COM	120	Intro. to Interpersonal Communication	3
COM	231	Public Speaking	3

## Humanities/Fine Arts

A.A.S. and Diploma programs must contain a minimum of 3 credit hours(1 course) in humanities/fine arts. Students may choose from the following:

ART	111	Art Appreciation	3
ART	114	Art History Survey I	3
ART	115	Art History Survey II	3
DRA	111	Theatre Appreciation	3
DRA	126	Storytelling	3
ENG	231	American Literature I	3
ENG	232	American Literature II	3
ENG	241	British Literature I	3
ENG	242	British Literature II	3
ENG	273	African-American Literature	3
HUM	110	Technology and Society	3
HUM	115	Critical Thinking	3
HUM	122	Southern Culture	3
MUS	110	Music Appreciation	3
MUS	112	Introduction to Jazz	3
MUS	210	History of Rock Music	3
PHI	210	History of Philosophy	3

PHI	215	Philosophical Issues	3
PHI	240	Introduction to Ethics	3
REL	110	World Religions	3
REL	211	Introduction to Old Testament	3
REL	212	Introduction to New Testament	3
SPA	111	Elementary Spanish I	3
SPA	112	Elementary Spanish II	3

#### Social/Behavioral Science

A.A.S. and Diploma programs must contain a minimum of 3 credit hours(1 course) in humanities/fine arts. Students may choose from the following:

ECO	251	Principles of Microeconomics	3
ECO	251	Principles of Macroeconomics	3
HIS	111	World Civilizations I	3
HIS	112	World Civilizations II	3
HIS	131	American History I	3
HIS	132	American History II	3
POL	120	American Government	3
POL	130	State and Local Government	3
POL	210	Comparative Government	3
PSY	150	General Psychology	3
PSY	239	Psychology of the Family	3
PSY	241	Developmental Psychology	3
PSY	244	Child Development I	3
PSY	244	Child Development II	3
PSY	281	Abnormal Psychology	3
SOC	210	Introduction to Sociology	3
SOC	213	Sociology of the Family	3
SOC	220	Social Problems	3
SOC	242	Sociology of Deviance	3

#### Natural Science/Mathematics

A.A.S. and Diploma programs must contain a minimum of 3 credit hours(1 course) in humanities/fine arts. Students may choose from the following:

AST	151	General Astronomy I	3
AST	151A	General Astronomy I Lab	1
AST	152	General Astronomy II	3
AST	152A	General Astronomy II Lab	1
BIO	111	General Biology I	4
BIO	112	General Biology II	4
BIO	163	Basic Anatomy and Physiology	5
BIO	168	Anatomy and Physiology I	4
BIO	169	Anatomy and Physiology II	4
BIO	275	Microbiology	4
CHM	131	Introduction to Chemistry	3
CHM	131A	Introduction to Chemistry Lab	1
CHM	151	General Chemistry I	4
CHM	152	General Chemistry II	4
MAT	110	Math Measurement and Literacy	3
MAT	121	Algebra and Trigonometry I	3
MAT	143	Quantitative Literacy	3
MAT	152	Statistical Methods I	3
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	4
MAT	271	Calculus I	4

MAT	272	Calculus II	4
MAT	273	Calculus III	4
MAT	280	Linear Algebra	3
MAT	285	Differential Equations	3
PHY	151	College Physics I	4

#### Major Courses:

A.A.S. Major Courses: 49 semester credit hours

\*\*Of the 49, 18 credit hours must be selected from courses of associate degree-level curriculum programs offered at the College

\*\*Thirty-one additional hours must be chosen from courses in curriculums offered by the College, including a maximum of eight credit hours through work experience, cooperative education, practicums and internships.

#### Other Required Hours:

ACA	115	Success and Study Skills	1
ACA	122	College Transfer Success	1
ACA	220	Professional Transition	1
ACC	120	Principles of Financial Accounting	4
ACC	121	Principles of Managerial Accounting	4
ACC	129	Individual Income Taxes	3
ACC	130	Business Income Taxes	3
ACC	140	Payroll Accounting	2
ACC	150	Accounting Software Applications	2
ACC	180	Practices in Bookkeeping	3
ACC	220	Intermediate Accounting I	4
ACC	221	Intermediate Accounting II	4
ACC	227	Practices in Accounting	3
ACC	240	Government and Not-for-Profit Accounting	3
ACC	250	Advanced Accounting	3
ACC	269	Audit and Assurance Services	3
AGR	265	Organic Crop Production: Spring	3
AGR	266	Organic Crop Production: Fall	3
AHR	110	Introduction to Refrigeration	5
AHR	111	HVACR Electricity	3
AHR	112	Heating Technology	4
AHR	113	Comfort Cooling	4
AHR	114	Heat Pump Technology	4
AHR	115	Refrigeration Systems	2
AHR	120	HVACR Maintenance	2
AHR	125	HVAC Electronics	2
AHR	130	HVAC Controls	3
AHR	135	Transportation Refrigeration	4
AHR	160	Refrigerant Certification	1
AHR	180	HVACR Customer Relations	1
AHR	210	Residential Building Code	2
AHR	211	Residential System Design	3
AHR	212	Residential System	3
AHR	213	HVACR Building	2
AHR	235	Refrigeration Design	3
AHR	245	Chiller Systems	2
ART	111	Art Appreciation	3
ART	114	Art History Survey I	3
ART	115	Art History Survey II	3
ART	121	Two-Dimensional Design	3
ART	171	Digital Design I	3



ART	275	Introduction to Commercial Art	3
ASL	111	Elementary ASL I	3
ASL	112	Elementary ASL II	3
ASL	181	ASL Lab I	1
ASL	182	ASL Lab II	1
AST	151	General Astronomy I	3
AST	151A	General Astronomy I Lab	1
AST	152	General Astronomy II	3
AST	152A	General Astronomy II Lab	1
ATR	112	Intro. to Automation	3
ATR	212	Industrial Robots	3
AUT	113	Automotive Servicing I	2
AUT	116	Engine Repair	3
AUT	116A	Engine Repair Lab	1
AUT	141	Suspension and Steering Systems	3
AUT	141A	Suspension and Steering Systems Lab	1
AUT	151	Brake Systems	3
AUT	151A	Brake Systems Lab	1
AUT	161	Basic Auto Electricity	5
AUT	181	Engine Performance I	3
AUT	181A	Engine Performance I Lab	1
AUT	183	Engine Performance II	4
AUT	221	Automatic Transmissions/Transaxles	3
AUT	221A	Auto Trans/Transaxles Lab	1
AUT	231	Manual Transmissions/Ax/Drtrains	3
AUT	231A	Manual Transmissions/Ax/Drtrains Lab	1
BIO	111	General Biology I	4
BIO	112	General Biology II	4
BIO	155	Nutrition	3
BIO	163	Basic Anatomy and Physiology	5
BIO	168	Anatomy and Physiology I	4
BIO	169	Anatomy and Physiology II	4
BIO	175	General Microbiology	3
BIO	275	Microbiology	4
BPR	111	Print Reading	2
BPR	121	Blueprint Reading: Mechanical	2
BPR	122	Blueprint Reading: Mechanical Advanced	2
BPR	135	Schematics and Diagrams	2
BUS	110	Introduction to Business	3
BUS	115	Business Law I	3
BUS	125	Personal Finance	3
BUS	135	Principles of Supervision	3
BUS	137	Principles of Management	3
BUS	147	Business Insurance	3
BUS	153	Human Resource Management	3
BUS	225	Business Finance	3
BUS	230	Small Business Management	3
BUS	240	Business Ethics	3
BUS	253	Leadership and Management Skills	3
BUS	260	Business Communication	3
BUS	280	REAL Small Business	4
CCT	110	Intro to Cyber Crime	3
CCT	112	Ethics and High Technology	3
CCT	121	Computer Crime Invest.	4
CCT	231	Technology Crimes and Law	3
CCT	250	Network Vulnerabilities	3
CCT	251	Network Vulnerabilities II	3

CCT	289	Capstone Project	3
CHM	131	Introduction to Chemistry	3
CHM	131A	Introduction to Chemistry Lab	1
CHM	132	Organic and Biochemistry	4
CHM	151	General Chemistry I	4
CHM	152	General Chemistry II	4
CHM	251	Organic Chemistry I	4
CHM	252	Organic Chemistry II	4
CHM	271	Biochemical Principles	3
CHM	271A	Biochemical Principles Lab	1
CIS	070	Fundamentals of Computing	1
CIS	110	Introduction to Computers	3
CIS	111	Basic PC Literacy	2
CIS	115	Introduction to Programming and Logic	3
CJC	100	Basic Law Enforcement Training	19
CJC	111	Intro to Criminal Justice*	3
CJC	112	Criminology	3
CJC	120	Interviews/Interrogations	2
CJC	121	Law Enforcement Operations*	3
CJC	122	Community Policing	3
CJC	131	Criminal Law	3
CJC	132	Court Procedures & Evidence	3
CJC	141	Corrections	3
CJC	144	Crime Scene Processing	3
CJC	160	Terrorism: Underlying Issues	3
CJC	161	Intro to Homeland Security	3
CJC	212	Ethics & Comm Relations	3
CJC	231	Constitutional Law	3
CJC	232	Civil Liability	3
COM	110	Introduction to Communication	3
COM	120	Introduction to Interpersonal Communication	3
COM	231	Public Speaking	3
COS	111	Cosmetology Concepts I	4
COS	112	Salon I	8
COS	113	Cosmetology Concepts II	4
COS	114	Salon II	8
COS	115	Cosmetology Concepts III	4
COS	116	Salon III	4
COS	117	Cosmetology Concepts IV	2
COS	118	Salon IV	7
COS	119	Esthetics Concepts I	2
COS	120	Esthetics Salon I	6
COS	121	Manicure/Nail Technology I	6
COS	125	Esthetics Concepts II	2
COS	126	Esthetics Salon II	6
COS	222	Manicure/Nail Technology II	6
COS	224	Trichology and Chemistry	2
COS	240	Contemporary Design	2
COS	250	Computerized Salon Ops	1
COS	251	Manicure Instructor Concepts	8
COS	252	Manicure Instructor Practicum	5
COS	253	Esthetics Instructor Concepts I	11
COS	254	Esthetics Instructor Concepts II	11
COS	271	Instructor Concepts I	5
COS	272	Instructor Practicum I	7
COS	273	Instructor Concepts II	5
COS	274	Instructor Practicum II	7
CSC	134	C++ Programming	3

CSC	151	JAVA Programming	3
CTI	110	Web, PGM and Db Foundation	3
CTI	120	Network and Security Foundations	3
CTI	140	Virtualization Concepts	3
CTS	115	Information Systems Business Concepts	3
CTS	120	Hardware/Software Support	3
CTS	130	Spreadsheet	3
CTS	135	Integrated Software Introduction	4
CTS	285	Systems Analysis and Design	3
CTS	289	System Support Project	3
DBA	110	Database Concepts	3
DDF	110	Cabinet Design/Drafting	2
DES	135	Principles and Elements of Design I	4
DFT	119	Basic CAD	2
DFT	170	Engineering Graphics	3
DRA	111	Theatre Appreciation	3
DRA	126	Storytelling	3
ECO	251	Principles of Microeconomics	3
ECO	252	Principles of Macroeconomics	3
EDU	119	Introduction to Early Child Education	4
EDU	131	Child, Family and Communication	3
EDU	144	Child Development I	3
EDU	145	Child Development II	3
EDU	146	Child Guidance	3
EDU	151	Creative Activities	3
EDU	153	Health, Safety and Nutrition	3
EDU	163	Classroom Management and Instruction	3
EDU	175	Introduction to Trade and Industry	3
EDU	184	Early Childhood Intro Practicum	2
EDU	187	Teaching and Learning for All	4
EDU	216	Foundations of Education	4
EDU	221	Children with Exceptional	3
EDU	222	Learn w/ Behavioral Disorders	3
EDU	223	Specific Learning Disabilities	3
EDU	234	Infants, Toddlers and Twos	3
EDU	235	School-Age Dev and Program	3
EDU	247	Sensory and Physical Disabilities	3
EDU	248	Developmental Delays	3
EDU	250	Teacher Licensure Prep	3
EDU	252	Math and Science Activities	3
EDU	261	Early Childhood Administration I	3
EDU	262	Early Childhood Administration II	3
EDU	271	Educational Technology	3
EDU	275	Effective Teaching Training	2
EDU	279	Literacy Development and Instruction	4
EDU	280	Language and Literacy Experience	3
EDU	281	Instructor Strategies/Read and Write	3
EDU	284	Early Childhood Capstone Practicum	4
EDU	285	Internship Experience—School Age	4
EDU	289	Advanced Issues/School Age	1
EGR	125	Applied Software for Technology	2
EGR	150	Introduction to Engineering	2
EGR	220	Engineering Statistics	3
ELC	111	Introduction to Electricity	3
ELC	112	DC/AC Electricity	5
ELC	113	Residential Wiring	4
ELC	115	Industrial Wiring	4
ELC	118	National Electric Code	2

ELC	119	NEC Calculations	2
ELC	128	Introduction to PLC	3
ELC	130	Advanced Motor Controls	3
ELC	131	Circuit Analysis	4
ELC	131A	Circuit Analysis I Lab	1
ELC	213	Instrumentation	4
ELN	131	Analog Electronics	4
ELN	133	Digital Electronics	4
ELN	135	Electronic Circuits	3
ELN	140	Semiconductor Devices	6
ELN	141	Digital Fundamentals	6
ELN	231	Industrial Controls	3
ELN	233	Microprocessor Systems	4
ELN	247	Electronic App Project	2
ELN	275	Troubleshooting	2
EGR	125	Appl Software for Tech	2
EMS	110	EMT	8
EMS	122	EMS Clinical Practicum I	1
EMS	130	Pharmacology	4
EMS	131	Advanced Airway Management	2
EMS	140	Rescue Scene Management	2
EMS	160	Cardiology I	3
EMS	220	Cardiology II	3
EMS	221	EMS Clinical Practicum II	2
EMS	231	EMS Clinical Practicum III	3
EMS	235	EMS Management	2
EMS	240	Patients with Special Challenges	2
EMS	241	EMS Clinical Practicum IV	4
EMS	250	Medical Emergencies	4
EMS	260	Trauma Emergencies	2
EMS	270	Lifespan Emergencies	4
EMS	285	EMS Capstone	2
ENG	101	Applied Communications I	3
ENG	111	Writing and Inquiry	3
ENG	112	Writing/Research in the Disciplines	3
ENG	114	Prof. Research & Reporting	3
ENG	125	Creative Writing I	3
ENG	231	American Literature	3
ENG	232	American Literature II	3
ENG	241	British Literature I	3
ENG	242	British Literature II	3
ENG	272	Southern Literature	3
ENG	273	African-American Literature	3
EPT	120	Sociology of Disaster	3
EPT	124	EM Services Law & Ethics	3
EPT	130	Mitigation & Preparedness	3
EPT	140	Emergency Management	3
EPT	150	Incident Management	3
EPT	210	Response & Recovery	3
EPT	220	Terrorism & Emer. Mgt	3
EPT	275	Emergency OPS Center Mgt	3
FIP	110	Fire Prot/Rest & Hotels	1
FIP	120	Intro to Fire Protection	3
FIP	124	Fire Prevention & Public Ed	3
FIP	132	Building Construction	3
FIP	146	Fire Protection Systems	4
FIP	162	Firefighter Safety & Wellness	3

FIP	176	HazMat: Operations	4
FIP	180	Wildland Fire Behavior	3
FIP	184	Wildland Fire Safety	3
FIP	220	Fire Fighting Strategies	3
FIP	228	Local Government Finance	3
FIP	229	Fire Dynamics and Combust	3
FIP	232	Hydraulics & Water Dist	3
FRE	111	Elementary French I	3
FRE	112	Elementary French II	3
GEL	111	Geology	4
GRD	110	Typography I	3
GRD	113	History of Graphic Design	3
GRD	121	Drawing Fundamentals I	3
GRD	131	Illustration I	2
GRD	141	Graphic Design I	4
GRD	142	Graphic Design II	4
GRD	151	Computer Design Basics	3
GRD	152	Computer Design Tech I	3
GRD	160	Photo Fundamentals I	3
GRD	180	Interactive Design	3
GRD	241	Graphic Design III	4
GRD	242	Graphic Design IV	4
GRD	249	Advanced Design Practice	4
GRD	263	Illustrative Imaging	3
GRD	271	Multimedia Design I	2
GRD	280	Portfolio Design	4
GRD	281	Design of Advertising	2
GRD	285	Client/Media Relations	2
GRO	120	Geneology	3
HEA	110	Personal Health/Wellness	3
HIT	110	Fundamentals of HIM	3
HIT	112	Health Law and Ethics	3
HIT	114	Health Data Systems/Standards	3
HIT	122	Professional Practice Exp I	1
HIT	124	Professional Practice Exp II	1
HIT	210	Healthcare Statistics	3
HIT	211	ICD Coding	4
HIT	213	Inpatient Proc. Coding and Reporting	2
HIT	214	CPT/Other Coding Systems	2
HIT	215	Reimbursement Methodology	2
HIT	216	Quality Management	2
HIT	217	Quality & Data Analytics	3
HIT	218	Mgmt Principles in HIT	3
HIT	220	Electronic Health Records	2
HIT	221	Lifecycle of HER	3
HIT	222	Prof Practice Exp III	2
HIT	225	Healthcare Informatics	4
HIT	226	Principles of Disease	3
HIT	227	Informatics Project Mgt	3
HIT	280	Professional Issues	2
HIS	111	World Civilizations I	3
HIS	112	World Civilizations II	3
HIS	131	American History I	3
HIS	132	American History II	3
HMT	110	Intro to Healthcare Mgt.	3
HMT	210	Medical Insurance	3
HMT	211	Longterm Care Admin.	3

HUM	110	Technology & Society	3
HUM	115	Critical Thinking	3
HUM	120	Technology and Society	3
HUM	122	Southern Culture	3
HYD	110	Hydraulics/Pneumatics I	3
ISC	112	Industrial Safety	2
ISC	115	Construction Safety	2
ISC	121	Environmental Health and Safety	3
ISC	130	Introduction of Quality Control	3
ISC	210	Oper and Prod Planning	3
MAC	114	Introduction to Metrology	2
MAC	121	Introduction to CNC	2
MAC	122	CNC Turning	2
MAC	124	CNC Milling	2
MAC	141	Machining Applications I	4
MAC	142	Machining Applications II	4
MAC	143	Machining Applications III	4
MAC	151	Machining Calculations	2
MAC	152	Adv Machining Calculations	2
MAC	222	Advanced CNC Turning	2
MAC	224	Advanced CNC Milling	2
MAC	231	CAM: CNC Turning	3
MAC	232	CAM: CNC Milling	3
MAC	247	Production Tooling	2
MAS	140	Introduction to Masonry	2
MAT	110	Math Measurement and Literacy	3
MAT	121	Algebra/Trigonometry I	3
MAT	122	Algebra/Trigonometry II	3
MAT	143	Quantitative Literacy	3
MAT	152	Statistical Methods I	4
MAT	171	Precalculus Algebra	4
MAT	172	Precalculus Trigonometry	4
MAT	271	Calculus I	4
MAT	272	Calculus II	4
MAT	273	Calculus III	4
MAT	280	Linear Algebra	3
MAT	285	Differential Equations	3
MEC	111	Machine Processes I	3
MEC	112	Machine Processes II	3
MEC	130	Mechanisms	3
MEC	141	Introduction Mfg Processes	3
MEC	142	Physical Metallurgy	2
MEC	161	Manufacturing Processes I	3
MED	120	Survey of Medical Terminology	2
MED	121	Medical Terminology I	3
MED	122	Medical Terminology II	3
MKT	120	Principles of Marketing	3
MKT	121	Retailing	3
MKT	122	Visual Merchandising	3
MKT	123	Fundamentals of Selling	3
MKT	220	Advertising and Sales Promotion	3
MKT	223	Customer Service	3
MKT	224	International Marketing	3
MKT	225	Marketing Research	3
MKT	227	Marketing Applications	3
MKT	230	Public Relations	3
MKT	232	Social Media Marketing	3
MNT	110	Introduction to Maintenance Procedures	2

MUS	110	Music Appreciation	3
MUS	112	Introduction to Jazz	3
MUS	210	History of Rock Music	3
NAS	101	Nursing Assistant I	6
NAS	102	Nursing Assistant II	6
NET	125	Networking Basics	3
NOS	110	Operating System Concepts	3
NOS	120	Linux/UNIX Single User	3
NOS	130	Windows Single User	3
NOS	230	Windows Admin I	3
NUR	101	Practical Nursing I	11
NUR	102	Practical Nursing II	12
NUR	103	Practical Nursing III	10
NUR	111	Introduction to Health Concepts	8
NUR	112	Health Illness Concepts	5
NUR	113	Family Health Concepts	5
NUR	114	Holistic Health Concepts	5
NUR	211	Health Care Concepts	5
NUR	212	Health System Concepts	5
NUR	213	Complex Health Concepts	10
NUR	214	Nursing Transition Concepts	4
NUT	110	Nutrition	3
OMT	112	Materials Management	3
OMT	143	Just-in-Time	2
OMT	260	Issues in Operations Mgmt	3
OST	080	Keyboarding Literacy	2
OST	122	Office Computations	2
OST	131	Keyboarding	2
OST	134	Text Entry and Formatting	3
OST	135	Adv Text Entry and Formatting	4
OST	136	Word Processing	3
OST	149	Medical Legal Issues	3
OST	153	Office Finance Solutions	2
OST	164	Text Editing Applications	3
OST	184	Records Management	3
OST	223	Admin Office Transcription I	3
OST	236	Adv Word/Information Processing	3
OST	241	Medical Office Transcription I	2
OST	242	Medical Office Transcription II	2
OST	244	Medical Document Production	2
OST	247	Procedure Coding	2
OST	248	Diagnostic Coding	2
OST	249	Medical Coding Certification Prep	3
OST	286	Professional Development	3
OST	289	Office Systems Management	3
PCI	264	Process Control with PLC's	4
PED	110	Fit and Well for Life	2
PED	111	Physical Fitness	1
PED	113	Aerobics I	1
PED	117	Weight Training I	1
PED	120	Walking for Fitness	1
PED	128	Golf-Beginning	1
PED	130	Tennis-Beginning	1
PED	139	Bowling-Beginning	1
PED	152	Swimming-Beginning	1
PED	155	Water Aerobics	1
PED	174	Wilderness Pursuits	1
PED	219	Disc Golf	1

PHI	210	History of Philosophy	3
PHI	215	Philosophical Issues	3
PHI	240	Introduction to Ethics	3
PHO	110	Fundamentals of Photography	5
PHO	113	History of Photography	3
PHO	115	Basic Studio Lighting	4
PHO	120	Intermediate Photography	4
PHO	132	Small-Format Photography	4
PHO	139	Introduction to Digital Imaging	2
PHO	140	Digital Photo Imaging I	4
PHO	150	Portfolio Development I	4
PHO	180	Creative Problem Solving	3
PHO	216	Documentary Photography	4
PHO	217	Photojournalism I	4
PHO	220	Business of Photography	3
PHO	222	Video Production	3
PHO	224	Multimedia Production	3
PHO	226	Portraiture	4
PHO	235	Commercial Photography	4
PHY	110	Conceptual Physics	3
PHY	110A	Conceptual Physics Lab	1
PHY	131	Physics-Mechanics	4
PHY	151	College Physics I	4
PHY	152	College Physics II	4
PHY	251	General Physics I	4
PHY	252	General Physics II	4
PLA	110	Introduction to Plastics	2
POL	120	American Government	3
POL	130	State and Local Government	3
POL	210	Comparative Government	3
PSY	118	Interpersonal Psychology	3
PSY	150	General Psychology	3
PSY	239	Psychology of Personality	3
PSY	241	Developmental Psychology	3
PSY	244	Child Development I	3
PSY	245	Child Development II	3
PSY	281	Abnormal Psychology	3
REF	116	Commercial Systems	4
REF	117	Refrigeration Controls	4
REF	123	Electrical Devices	3
REL	110	World Religions	3
REL	211	Introduction to Old Testament	3
REL	212	Introduction to New Testament	3
SEC	110	Security Concepts	3
SEC	160	Security Administration	3
SEC	260	Security Administration II	3
SOC	210	Introduction to Sociology	3
SOC	213	Sociology of the Family	3
SOC	220	Social Problems	3
SOC	242	Sociology of Deviance	3
SPA	110	Introduction to Spanish	2
SPA	111	Elementary Spanish I	3
SPA	112	Elementary Spanish II	3
SPA	181	Spanish Lab I	1
SPA	182	Spanish Lab II	1
SPA	211	Intermediate Spanish I	3



SPA	212	Intermediate Spanish II	3
SPA	281	Spanish Lab III	1
SPA	282	Spanish Lab IV	1
TRN	111	Chassis Maint./Light Repair	4
TRN	112	Powertrain Maint./Light Repair	4
TRN	170	PC Skills for Transportation	2
TRN	180	Basic Welding for Transportation	3
WBL	111	Work-Based Learning I	1
WBL	112	Work-Based Learning I	2
WBL	113	Work-Based Learning I	3
WBL	114	Work-Based Learning I	4
WBL	121	Work-Based Learning II	1
WBL	122	Work-Based Learning II	2
WBL	123	Work-Based Learning II	3
WBL	124	Work-Based Learning II	4
WBL	131	Work-Based Learning III	1
WBL	132	Work-Based Learning III	2
WBL	133	Work-Based Learning III	3
WBL	134	Work-Based Learning III	4
WBL	211	Work-Based Learning IV	1
WBL	212	Work-Based Learning IV	2
WBL	213	Work-Based Learning IV	3
WBL	214	Work-Based Learning IV	4
WEB	110	Internet/Web Fundamentals	3
WEB	111	Introduction to Web Graphics	3
WEB	115	Web Markup and Scripting	3
WEB	120	Introduction to Internet Multimedia	3
WEB	140	Web Development Tools	3
WEB	151	Mobile Application Dev. I	3
WEB	179	JAVA Web Programming	3
WEB	182	PHP Programming	3
WEB	210	Web Design	3
WEB	214	Social Media	3
WEB	225	Content Management Systems	3
WEB	230	Implementing Web Services	3
WEB	250	Database Driven Websites	3
WEB	285	Emerging Web Technologies	3
WEB	287	Web E-Portfolio	2
WLD	110	Cutting Processes	2
WLD	112	Basic Welding Processes	2
WLD	115	SMAW(Stick)Plate	5
WLD	116	SMAW(Stick)Plate/Pipe	4
WLD	121	GMAW(MIG)FCAW/Plate	4
WLD	131	GTAW(TIG)Plate	4
WLD	141	Symbols and Specifications	3
WLD	151	Fabrication I	4
WLD	261	Certification Practices	2

# Healthcare Management Technology

A25200M (Associate Degree) C25200M (Certificate)

The Healthcare Management Technology curriculum prepares individuals for employment in healthcare business and financial operations in areas such as general healthcare management, entrepreneurship, and long-term care.

Course work includes medical office management, financial management, legal aspects of healthcare, medical insurance and billing analysis, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of healthcare settings including hospitals, medical offices, outpatient clinics, long-term care facilities, and insurance companies. Industry recognized certifications may be available for graduates with work experience.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

<b>I. General Education Courses</b>		Class	Lab	Credit
COM-120	Intro to Interpersonal Communication	3	0	3
ENG-111	Writing and Inquiry	3	0	3
ENG-112	Research & Writing	3	0	3
MAT-152	Statistical Methods I	3	2	4

## **Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences:**

Humanities: HUM-115 Critical Thinking; HUM-122 Southern Culture; or ART-111 Art Appreciation  
Social/Behavioral Science: PSY-150 General Psychology or SOC-210 Introduction to Sociology

<b>II. Major Courses</b>					
ACC-120	Principles of Financial Accounting	3	2	4	
ACC-121	Principles of Managerial Accounting		3	2	4
CIS-111	Basic PC Literacy	1	2	2	
HMT-110	Intro to Healthcare Management	3	0	3	
HMT-210	Medical Insurance		3	0	3
MED-121	Medical Terminology I	3	0	3	
MED-122	Medical Terminology II	3	0	3	
OST-149	Medical Legal Issues	3	0	3	

## **III. Required Subject Area**

BUS-137	Principles of Management	3	0	3	
BUS-153	Human Resource Management	3	0	3	
BUS-253	Leadership & Management Skills	3	0	3	
HMT-212	Management of Healthcare Org	3	0	3	

## **IV. Other Major Courses**

HIT-114	Health Data Sys/Standards	2	3	3	
HIT-217	Quality & Data Analytics	2	3	3	
HMT-220	Healthcare Financial Management	4	0	4	
HMT-225	Practice Mgmt. Simulation	2	2	3	

## **V. Other Required Courses**

ACA-115	Success and Study Skills	0	2	1	
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**Total Credits: 70**

### *Recommended Semester Schedule*

#### **First Year Fall**

ACA-115	Success and Study Skills	0	2	1
ENG-111	Writing & Inquiry	3	0	3
HMT-110	Intro to Healthcare Management	3	0	3
MED-121	Medical Terminology I	3	0	3
OST-149	Medical Legal Issues	3	0	3

#### **First Year Spring**

CIS-111	Basic PC Literacy	1	2	2
ENG-112	Writing/Research in Disc	3	0	3
HIT-114	Health Data Sys/Standards	2	3	3
MED-122	Medical Terminology II	3	0	3
MAT-152	Statistical Methods I	3	2	4

#### **First Year Summer**

COM-120	Intro to Interpersonal Communication	3	0	3
Social Science Elective		3	0	3
Humanities Elective		3	0	3

#### **Second Year Fall**

ACC-120	Principles of Financial Accounting	3	2	4
HMT-210	Medical Insurance		3	0
HMT-212	Management of Healthcare Organization	3	0	3
BUS-137	Principles of Management	3	0	3
BUS-253	Leadership & Management Skills	3	0	3

#### **Second Year Spring**

ACC-122	Principles Managerial Accounting	3	2	4
BUS-153	Human Resource Management	3	0	3
HIT-217	Quality & Data Analytics	2	3	3
HMT-220	Healthcare Financial Management <sup>(1st 8 weeks)</sup>	4	0	4
HMT-225	Practice Mgmt. Simulation <sup>(2nd 8 weeks)</sup>	2	2	3

### *Healthcare Management Technology Receptionist Certificate - C25200M*

#### **I. Major Courses**

HMT-110	Intro to Healthcare Management	3	0	3
MED-121	Medical Terminology I	3	0	3
MED-122	Medical Terminology II	3	0	3
OST-149	Medical Legal Issues	3	0	3

#### **II. Concentration**

BUS-253	Leadership & Management Skills	3	0	3
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#### **III. Other Major**

HIT-114	Health Data Sys/Standards	2	3	3
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**Total Credits: 18**

***Recommended Semester Schedule***

**First Year Fall**

HMT-110	Intro to Healthcare Management	3	0	3
MED-121	Medical Terminology I	3	0	3
OST-149	Medical Legal Issues	3	0	3

**First Year Spring**

BUS-253	Leadership & Management Skills	3	0	3
HIT-114	Health Data Sys/Standards	2	3	3
MED-122	Medical Terminology II	3	0	3

# *Healthcare Management Technology: Long-Term Care*

A25200L (Associate Degree) C25200L (Certificate)

The Healthcare Management Technology curriculum prepares individuals for employment in healthcare business and financial operations in areas such as general healthcare management, entrepreneurship, and long-term care. Course work includes medical office management, financial management, legal aspects of healthcare, medical insurance and billing analysis, and other topics depending on the subject area selected within this curriculum. Graduates should qualify for employment opportunities in a variety of healthcare settings including hospitals, medical offices, outpatient clinics, long-term care facilities, and insurance companies. Industry recognized certifications may be available for graduates with work experience.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

<b>I. General Education Courses</b>		Class	Lab	Credit
COM-120	Intro to Interpersonal Communication	3	0	3
ENG-111	Writing and Inquiry	3	0	3
ENG-112	Research & Writing	3	0	3
MAT-152	Statistical Methods I	3	2	4

**Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences:**

Humanities: HUM-115 Critical Thinking; HUM-122 Southern Culture; or ART-111 Art Appreciation

Social/Behavioral Science: PSY-150 General Psychology or SOC-210 Introduction to Sociology

<b>II. Major Courses</b>					
ACC-120	Principles of Financial Accounting	3	2	4	
ACC-121	Principles of Managerial Accounting		3	2	4
CIS-111	Basic PC Literacy	1	2	2	
HMT-110	Intro to Healthcare Management	3	0	3	
HMT-210	Medical Insurance		3	0	3
MED-121	Medical Terminology I	3	0	3	
MED-122	Medical Terminology II	3	0	3	
OST-149	Medical Legal Issues	3	0	3	

**III. Required Subject Area**

GRO-120	Gerontology	3	0	3
HMT-211	Long-Term Care Administration	3	0	3
HMT-212	Management of Healthcare Organization	3	0	3
OST-250	Long-Term Care Coding	3	0	3

**IV Other Major Courses**

HIT-114	Health Data Sys/Standards	2	3	3
HIT-217	Quality & Data Analytics	2	3	3
HMT-220	Healthcare Financial Management	4	0	4
HMT-225	Practice Mgmt. Simulation	2	2	3

**V. Other Required Courses**

ACA-115	Success and Study Skills	0	2	1
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**Total Credits: 70**

### *Recommended Semester Schedule*

#### **First Year Fall**

ACA 115	Success and Study Skills	0	2	1
ENG-111	Writing & Inquiry	3	0	3
HMT-110	Intro to Healthcare Management	3	0	3
MED-121	Medical Terminology I	3	0	3
OST-149	Medical Legal Issues	3	0	3

#### **First Year Spring**

CIS-111	Basic PC Literacy	1	2	2
ENG-112	Writing/Research in Disc	3	0	3
HIT-114	Health Data Sys/Standards	2	3	3
MED-122	Medical Terminology II	3	0	3
MAT-152	Statistical Methods	3	2	4

#### **First Year Summer**

COM-120	Intro to Interpersonal Communication	3	0	3
Social Science Elective		3	0	3
Humanities Elective		3	0	3

#### **Second Year Fall**

ACC-120	Principles of Financial Accounting	3	2	4	
HMT-210	Medical Insurance		3	0	3
HMT-212	Management of Healthcare Organization	3	0	3	
GRO-120	Gerontology	3	0	3	
OST-250	Long-Term Care Coding	2	2	3	

#### **Second Year Spring**

ACC-122	Principles of Managerial Accounting		3	2	4
HMT-211	Long-Term Care Administration	3	0	3	
HIT-217	Quality & Data Analytics	2	3	3	
HMT-220	Healthcare Financial Management	4	0	4	
HMT-225	Practice Mgmt. Simulation	2	2	3	

### *Healthcare Management Technology Long-Term Care - Certificate C25200L*

#### **IV. Major Courses**

HMT-110	Intro to Healthcare Management	3	0	3
MED-121	Medical Terminology I	3	0	3
OST-149	Medical Legal Issues	3	0	3

#### **V. Concentration**

GRO-120	Gerontology	3	0	3
HMT-211	Long-Term Care Admin	3	0	3
OST-250	Long-Term Care Coding	2	2	3

**Total Credits: 18**

### *Recommended Semester Schedule*

#### **First Year Fall**

HMT-110	Intro to Healthcare Management	3	0	3
MED-121	Medical Terminology I	3	0	3
OST-149	Medical Legal Issues	3	0	3

**First Year Spring**

GRO-120	Gerontology		3	0	3
HMT-211	Long-Term Care Admin		3	0	3
OST-250	Long-Term Care Coding	2	2	3	

# Health Information Technology

A45360 (Associate) D45360 (Diploma)  
C45360A (Certificate) C45360B (Certificate)  
C45360IF (Certificate)

The Health Information Technology Curriculum is designed to provide individuals with the technical knowledge and skills to process, analyze, maintain, and report health information data in compliance with legal, accreditation, licensure and certification standards.

Course work includes diagnosis and procedure coding/classification systems, privacy and security strategies, health informatics, data analytics and use, revenue cycle management, regulatory compliance, and organizational leadership.

Graduates of this program may be eligible to write the national certification exam to become a Registered Health Information Technician (RHIT). Employment opportunities include hospitals, rehabilitation facilities, nursing homes, health insurance organizations, outpatient clinics, physicians' offices, hospice, and mental health facilities

**\*\*The Health Information Technology program is accredited by the Commission on the Accreditation for Health Informatics and Information Management (CAHIIM) Education\*\*.**

Please visit the McDowell Technical Community College Health Science website for current admission information:

<http://www.mcdowelltech.edu/HIT/>

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Associate Degree Program (A45360)*

Title			Class/Lab/Credit		
I. General Education Courses					
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Discipline	3	0	3
MAT	152	Statistical Methods I	3	2	4

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

<b>II. Major Courses</b>			Class	Lab	Clin.	Credit
<b>Required Courses:</b>						
HIT	110	Introduction to Healthcare & HIM	3	0	0	3
HIT	112	Health Law and Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
HIT	211	Diagnosis Coding & Reporting	2	3	0	3
HIT	213	INPT Procedure Coding & Reporting	1	3	0	2
HIT	214	OP Procedure Coding & Reporting	1	3	0	2
HIT	215	Revenue Cycle Management	1	3	0	2
HIT	217	Quality & Data Analysis	2	3	0	3
HIT	218	Management Principles in HIT	3	0	0	3
HIT	226	Pathophysiology & Pharmacology	2	3	0	3
HIT	280	HIM Capstone	2	0	0	2
<b>Required Subject Area:</b>						
Medical Terminology						
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3



Anatomy & Physiology						
BIO	163	Basic Anatomy & Physiology	4	2	0	5
Professional Practice Experience						
HIT	122	Professional Practice Experience I	0	0	3	1
HIT	124	Professional Practice Experience II	0	0	3	1
HIT	222	Professional Practice Experience III	0	0	6	2

### III. Other Major Courses

CIS	111	Basic PC Literacy	1	2	0	2
HIT	220	Electronic Health Records	1	2	0	2
HIT	221	Lifecycle of EHR	2	2	0	3
HIT	227	Informatics Project Management	2	2	0	3

### IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	0	1
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**Total Credits:** 71

## *Recommended Semester Schedule*

### First Year-Fall

ACA	115	Success and Study Skills	0	2	0	1
BIO	163	Basic Anatomy & Physiology	4	2	0	5
CIS	111	Basic PC Literacy	1	2	0	2
HIT	110	Introduction to Healthcare & HIM	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3

### First Year-Spring

ENG	111	Writing and Inquiry	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
HIT	211	Diagnosis Coding & Reporting	2	3	0	3
MAT	152	Statistical Methods I		3	2	4
MED	122	Medical Terminology II	3	0	0	3

### First Year-Summer

ENG	112	Writing/Research in the Discipline	3	0	0	3
HIT	112	Health Law and Ethics	3	0	0	3
PSY	150	General Psychology	3	0	0	3
Humanities/Art Elective-see list on page 76			3	0	0	3

### Second Year-Fall

HIT	122	Professional Practice Experience I	0	0	3	1
HIT	124	Professional Practice Experience II	1	0	3	1
HIT	213	INPT Procedure Coding & Reporting	1	3	0	2
HIT	215	Revenue Cycle Management	1	3	0	2
HIT	218	Management Principles in HIT	3	0	0	3
HIT	220	Electronic Health Records	1	2	0	2
HIT	226	Pathophysiology	2	3	0	3

### Second Year-Spring

HIT	214	OP Procedure Coding & Reporting	1	3	0	2
HIT	217	Quality & Data Analysis	2	3	0	3
HIT	221	Lifecycle of EHR	2	2	0	3
HIT	222	Professional Practice Experience III	0	0	6	2
HIT	227	Informatics Project Management	2	2	0	3
HIT	280	HIM Capstone	2	0	0	2

***Health Information Technology Coding Diploma (D45360)***  
***Medical Coding Concentration***

Title			Class	Lab	Clin.	Credit
<b>I. General Education Courses</b>						
ENG	111	Writing and Inquiry	3	0	0	3
MAT	152	Statistical Methods I		3	2	4
<b>II. Major Courses</b>						
HIT	112	Health Law and Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
HIT	211	Diagnosis Coding & Reporting	2	3	0	3
HIT	213	INPT Procedure Coding & Reporting	1	3	0	2
HIT	214	OP Procedure Coding & Reporting	1	3	0	2
HIT	215	Revenue Cycle Management	1	3	0	2
HIT	226	Pathophysiology & Pharmacology	2	3	0	3
<b>Required Subject Area:</b>						
Medical Terminology						
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3
Anatomy & Physiology						
BIO	163	Basic Anatomy & Physiology	4	2	0	5
Professional Practice Experience						
HIT	124	Professional Practice Experience II	0	0	3	1
HIT	222	Professional Practice Experience III	0	0	6	2
<b>III. Other Required Courses</b>						
ACA	115	Success and Study Skills	0	2	0	1
<b>Total Credits: 40</b>						

***Recommended Semester Schedule***

Title			Class	Lab	Clin.	Credit
<b>First Year-Fall</b>						
ACA	115	Success and Study Skills	0	2	0	1
BIO	163	Basic Anatomy & Physiology	4	2	0	5
ENG	111	Writing and Inquiry	3	0	0	3
HIT	213	INPT Procedure Coding & Reporting	1	3	0	2
HIT	215	Revenue Cycle Management	1	3	0	2
MED	121	Medical Terminology I	3	0	0	3
<b>First Year-Spring</b>						
HIT	114	Health Data Systems/Standards	2	3	0	3
HIT	211	Diagnosis Coding & Reporting	2	3	0	3
HIT	214	OP Procedure Coding & Reporting	1	3	0	2
HIT	222	Professional Practice Experience III	0	0	6	2
MAT	152	Statistical Methods I	3	0	2	4
MED	122	Medical Terminology II	3	0	0	3
<b>First Year-Summer</b>						
HIT	112	Health Law and Ethics	3	0	0	3
HIT	124	Professional Practice Experience II	0	0	3	1
HIT	226	Pathophysiology & Pharmacology	2	3	0	3

***Health Information Technology Certificate Program (C45360A)***  
***Release of Information Concentration***

Title			Class	Lab	Clin.	Credit
<b>I. Major Courses</b>						
HIT	110	Introduction to Healthcare and HIM	3	0	0	3
HIT	112	Health Law & Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3

**Required Subject Area:**

Medical Terminology

MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3

**II. Other Major Courses**

CIS	111	Basic PC Literacy	1	2	0	2
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**Total Credits: 17**

***Recommended Semester Schedule***

**First Year-Fall**

CIS	111	Basic PC Literacy	1	2	0	2
HIT	110	Introduction to Healthcare and HIM	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3

**First Year-Spring**

HIT	112	Health Law Ethics	3	0	0	3
HIT	114	Health Data Systems/Standards	2	3	0	3
MED	122	Medical Terminology II	3	0	0	3

***Health Information Technology Certificate (C45360B)***  
***Concentration in Medical Billing and Coding***

Title			Class	Lab	Clin.	Credit
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**I. Major Courses**

HIT	215	Revenue Cycle Management	1	3	0	2
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**Required Subject Area:**

Medical Terminology

MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3

Professional Practice Experience

HIT	124	Professional Practice Experience II	0	0	3	1
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**II. Other Major Courses**

OST	247	Procedural Coding	2	2	0	3
OST	248	Diagnostic Coding	2	2	0	3
OST	249	Medical Coding Certification Prep	2	3	0	3

**Total Credits: 18**

### *Recommended Semester Schedule*

#### **First Year-Fall**

HIT	215	Revenue Cycle Management	1	3	0	2
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3

#### **First Year-Spring**

OST	247	Procedural Coding	2	2	0	3
OST	248	Diagnostic Coding	2	2	0	3

#### **First Year-Summer**

HIT	124	Professional Practice Experience	0	0	3	1
OST	249	Medical Coding Certification Prep	2	3	0	3

### *Health Information Technology Certificate(C45360-IF)* *Healthcare Informatics Concentration*

Title			Class	Lab	Clin.	Credit
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#### **I. Major Courses**

HIT	112	Health Law and Ethics		3	0	0	3
HIT	114	Health Data Systems/Standards		2	3	0	3

#### **II. Other Major Courses**

HIT	220	Electronic Health Records		1	2	0	2
HIT	221	Lifecycle of EHR		2	2	0	3
HIT	225	Healthcare Informatics		2	2	0	3
HIT	227	Informatics Project Management		2	2	0	3

**Total Credits: 17**

### *Recommended Semester Schedule*

#### **First Year-Fall**

HIT	112	Health Law and Ethics		3	0	0	3
HIT	220	Electronic Health Records		1	2	0	2
HIT	225	Healthcare Informatics		2	2	0	3

#### **First Year-Spring**

HIT	114	Health Data Systems/Standards		2	3	0	3
HIT	221	Lifecycle of EHR		2	2	0	3
HIT	227	Informatics Project Management		2	2	0	3

# *Health Science: Therapeutic and Diagnostic Services/Nurse Aide*

## **D45970 (Diploma)**

This curriculum is designed to prepare students for careers in the Health Sciences.

Students will complete general education courses that provide a foundation for success in nursing and allied health curricula. Students may select a career pathway that will prepare them for an entry level position in health care. Courses may also provide foundational knowledge needed in the pursuit of advanced health science degrees or programs.

Graduates should qualify for an entry-level job associated with the program major such as Emergency Medical Technician (EMT) or Advanced Emergency Medical Technician (AEMT), Medical Assistant, Nurse Aide, Pharmacy Technician, Phlebotomist, or Massage Therapist dependent upon the selected program major.

**Nurse Aide:** The Nurse Aide curriculum prepares individuals to work under the supervision of licensed nursing professionals in performing nursing care and services for persons of all ages. Topics include growth and development, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management, family resources and services, and employment skills. Upon completion, the student may be eligible for listing as a Nurse Aide I and other selected Nurse Aide registries as determined by the local program of study.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

### *Diploma Program*

Title	Class/Lab/Clinical/Credit				
I. General Education Courses					
ENG 111	Writing and Inquiry	3	0	0	3
PSY 150	General Psychology	3	0	0	3
II. Major Courses					
NAS 101	Nurse Aide I	3	4	3	6
NAS 102	Nurse Aide II	3	2	6	6
MED 121	Medical Terminology I	3	0	0	3
MED 122	Medical Terminology II	3	0	0	3
III. Other Major Courses					
BIO 168	Anatomy and Physiology I	3	3	0	4
BIO 169	Anatomy and Physiology II	3	3	0	4
CIS 110	Introduction to Computers	2	2	0	3
PSY 241	Developmental Psychology		3	00	3
IV. Other Required Courses					
ACA 115	Success and Study Skills	0	2	0	1

**Total Credits: 39**

### *Recommended Semester Schedule*

#### **First Year-Fall**

			Class/Lab/Clinical/Credit			
NAS	101	Nurse Aide I	3	4	3	6
ACA	115	Success and Study Skills	0	2	0	1
ENG	111	Writing and Inquiry	3	0	0	3
MED	121	Medical Terminology I	3	0	0	3
BIO	168	Anatomy and Physiology I	3	3	0	4

#### **Spring Semester**

BIO	169	Anatomy and Physiology II			3	3	0	4
MED	122	Medical Terminology II	3	0	0		3	
NAS	102	Nurse Aide II	3	2		6	6	
PSY	150	General Psychology	3	0	0		3	

#### **Summer Semester**

CIS	110	Introduction to Computers			2	2	0	3
PSY	241	Developmental Psychology			3	0	0	3

# Information Technology: Information Systems

A25590A (Associate Degree) C25590A (Certificate)

C25590B (Certificate)

Information Systems is a curriculum within the Information Technology Pathway:

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Information Systems Associate Degree Program (A25590A)*

Title	Class/Lab/Credit
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### **I. General Education Courses**

ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

### **II. Major Courses**

CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm, and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3

### **III. Concentration**

CTS	120	Hardware/Software Support	2	3	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3

### **IV. Other Major Courses**

#### **Take 25 Credits**

ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
CSC	134	C++ Programming	2	3	3
CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
NET	125	Introduction to Networks	1	4	3
WEB	115	Web Markup and Scripting	2	2	3
WEB	214	Social Media	2	2	3

**Take 3 credits from:**

CTI	140	Virtualization Concepts	1	4	3
CTS	130	Spreadsheet	2	2	3
ELN	233	Microprocessor Systems	3	3	4
NOS	110	Operating Systems Concepts	2	3	3
OST	136	Word Processing	2	2	3
WEB	120	Introduction to Internet Multimedia	2	2	3
WEB	225	Content Management Systems	2	2	3

**Take 3 credits from:**

WEB	111	Intro to Web Graphics	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

**Take 2 credits from:**

OST	286	Professional Development	3	0	3
WEB	287	Web E-Portfolio	1	2	2

**V. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 73*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
NET	125	Introduction to Networks	1	4	3
WEB	115	Web Markup and Scripting	2	2	3

**First Year-Spring**

COM	231	Public Speaking	3	0	3
CTS	120	Hardware/Software Support	2	3	3
DBA	110	Database Concepts	2	3	3
NOS	130	Windows Single User	2	2	3

## Pick List 1(Select one)

CTS	130	Spreadsheet	2	2	3
NOS	110	Operating Systems Concepts	2	3	3
ELN	233	Fundamentals of Microprocessors	3	3	4
OST	136	Word Processing	2	2	3
WEB	120	Intro Internet Multimedia	2	2	3
WEB	225	Content Management System	2	2	3

**First Year-Summer**

CSC	151	Java Programming	2	3	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3

**Second Year-Fall**

ACC	120	Prin Fin Accounting	3	2	4
NOS	120	Linux/Unix Single User	2	2	3
NOS	230	Windows Admin I	2	2	3



Pick List 2(Select one)

WEB	111	Web Graphics	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

### Second Year-Spring

BUS	110	Intro to Business	3	0	3
CSC	134	C++ Programming	2	3	3
CTI	120	Network & Security Foundation	2	2	3
WEB	214	Social Media	2	2	3

Pick List 3(Select one)

WEB	287	Web E-Portfolio	1	2	2
OST	286	Professional Development	3	0	3

### Second Year-Summer

ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3

## *Information Systems Certificate (C25590A)*

Title	Class/Lab/Credit
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### I. Major Courses

CIS	110	Introduction to Computers	2	2	3
CTS	120	Hardware/Software Support	2	3	3
NOS	130	Windows Single User	2	2	3

### III. Other Major Courses

WEB	115	Web Markup and Scripting	2	2	3
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**Total Credits: 12**

## *Recommended Semester Schedule*

### First Year-Fall

CIS	110	Intro to Computers	2	2	3
WEB	115	Web Markup and Scripting	2	2	3

### First Year-Spring

NOS	130	Windows Single User	2	2	3
CTS	120	Hardware/Software Support	2	3	3

## *Information Systems Advanced Certificate (C25590B)*

Title	Class/Lab/Credit
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### I. Major Courses

CTI	120	Network & Sec Foundation	2	2	3
NOS	120	Linux/Unix Single User	2	2	3
NOS	230	Windows Admin I	2	2	3

### III. Other Major Courses

CSC	151	JAVA Programming	2	3	3
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**Total Credits: 12**

### *Recommended Semester Schedule*

#### **First Year-Fall**

NOS	230	Windows Admin I	2	2	3
NOS	120	Linux/Unix Single User	2	2	3

#### **First Year-Spring**

CSC	151	Java Programming	2	3	3
CTI	120	Network & Sec Foundation	2	2	3

# *Information Technology: Software and Web Development*

A25590C (Associate Degree)  
C25590E (Certificate) C25590F (Certificate)

Software and Web Development is a curriculum within the Information Technology Pathway: The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Software and Web Development Associate Degree Program (A25590C)*

<u>Title</u>	<u>Class/Lab/Credit</u>
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### **I. General Education Courses**

ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

### **II. Major Courses**

CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm, and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3

### **III. Concentration**

CSC	151	Java Programming	2	3	3
WEB	115	Web Markup and Scripting	2	2	3

### **IV. Other Major Courses**

DBA	110	Database Concepts	2	3	3
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Tech I	1	4	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	120	Intro to Internet Multimedia	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3

WEB	225	Content Management Systems	2	2	3
WEB	250	Database Driven Websites	2	2	3
WEB	285	Emerging Web Technologies	2	2	3
WEB	287	Web E-Portfolio	1	2	2

#### **V. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 72**

### ***Recommended Semester Schedule***

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	115	Web Markup & Scripting	2	2	3

#### **First Year-Spring**

CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
WEB	120	Intro Internet Multimedia	2	2	3
WEB	225	Content Management System	2	2	3

#### **First Year-Summer**

COM	231	Public Speaking	3	0	3
		Humanities Elective	3	0	3
		Social Science Elective	3	0	3

#### **Second Year-Fall**

GRD	151	Computer Design Basics	1	4	3
WEB	140	Web Development Tools	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

#### **Second Year-Spring**

CTI	120	Network & Security Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	250	Database Driven Websites	2	2	3
WEB	287	Web E-Portfolio	1	2	2

#### **Second Year-Summer**

ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3

***Software and Web Development  
Certificate Program (C25590E)***

Title			Class/Lab/Credit		
I. Major Courses					
CSC	151	Java Programming	2	3	3
WEB	115	Web Markup and Scripting	2	2	3

<b>II. Other Major Courses</b>					
DBA	110	Database Concepts	2	3	3
WEB	111	Intro to Web Graphics	2	2	3

**Total Credits: 12**

***Recommended Semester Schedule***

<b><u>First Year-Fall</u></b>					
WEB	111	Web Graphics	2	2	3
WEB	115	Web Markup and Scripting	2	2	3

<b><u>First Year-Spring</u></b>					
CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3

***Software and Web Development Advanced  
Certificate Program (C25590F)***

Title			Class/Lab/Credit		
I. Major Courses					
CTI	120	Network & Sec Foundation	2	2	3
II. Other Major Courses					
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3
WEB	250	Database Driven Websites	2	2	3

**Total Credits: 12**

***Recommended Semester Schedule***

<b><u>First Year-Fall</u></b>					
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3

<b><u>First Year-Spring</u></b>					
CTI	120	Network & Sec Foundation	2	2	3
WEB	250	Database Driven Websites	2	2	3

# *Information Technology: Web Administration & Design*

A25590D (Associate Degree)  
C25590G (Certificate) C25590H (Certificate)

Web Administration & Design is a curriculum within the Information Technology Pathway:

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Web Administration & Design Associate Degree Program (A25590D)*

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Science					
<b>II. Major Courses</b>					
CIS	110	Introduction to Computers	2	2	3
CTI	110	Web, Pgm,and Db Foundation	2	2	3
CTI	120	Network & Sec Foundation	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
<b>III. Concentration</b>					
WEB	115	Web Markup and Scripting	2	2	3
WEB	210	Web Design	2	2	3
<b>IV. Other Major Courses</b>					
CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Tech I	1	4	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	120	Intro to Internet Multimedia	2	2	3
WEB	140	Web Development Tools	2	2	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	214	Social Media	2	2	3
WEB	250	Database Driven Websites	2	2	3

WEB	285	Emerging Web Technologies	2	2	3
WEB	287	Web E-Portfolio	1	2	2

#### V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 72**

#### First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Intro to Computers	2	2	3
CTS	115	Info Sys Business Concepts	3	0	3
CTI	110	Web, Pgm, & Db Foundation	2	2	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	115	Web Markup & Scripting	2	2	3

#### First Year-Spring

CSC	151	Java Programming	2	3	3
DBA	110	Database Concepts	2	3	3
WEB	120	Intro Internet Multimedia	2	2	3
WEB	214	Social Media	2	2	3

#### First Year-Summer

COM 231		Public Speaking	3	0	3
Humanities Elective			3	0	3
Social Science Elective			3	0	3

#### Second Year-Fall

GRD	151	Computer Design Basics	1	4	3
WEB	140	Web Development Tools	2	2	3
WEB	182	PHP Programming	2	2	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3

#### Second Year-Spring

CTI	120	Network & Security Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3
WEB	151	Mobile Application Dev I	2	2	3
WEB	250	Database Driven Websites	2	2	3
WEB	287	Web E-Portfolio	1	2	2

#### Second Year-Summer

ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3

### *Web Administration & Design Certificate Program (C25590G)*

Title	Class/Lab/Credit
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#### I. Major Courses

WEB	115	Web Markup and Scripting	2	2	3
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#### II. Other Major Courses

WEB	111	Intro to Web Graphics	2	2	3
WEB	120	Intro to Internet Multimedia	2	2	3
WEB	214	Social Media	2	2	3

**Total Credits: 12**

**First Year-Fall**

WEB 111	Web Graphics	2	2	3
WEB 115	Web Markup and Scripting	2	2	3

**First Year-Spring**

WEB 120	Intro Internet Multimedia	2	2	3
WEB 214	Social Media	2	2	3

***Web Administration & Design Advanced  
Certificate Program (C25590H)***

Title	Class/Lab/Credit
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**I. Major Courses**

CTI	120	Network & Sec Foundation	2	2	3
WEB	210	Web Design	2	2	3

**II. Other Major Courses**

GRD	151	Computer Design Basics	1	4	3
GRD	152	Computer Design Tech I	1	4	3

**Total Credits: 12****First Year-Fall**

GRD	151	Computer Design Basics	1	4	3
WEB	210	Web Design	2	2	3

**First Year-Spring**

CTI	120	Network & Sec Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3



# Mechatronics Engineering Technology

A40350 (Associate Degree), D40350 (Diploma), C40350 (Certificate)

A course of study that prepares the students to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures. Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title	Class/Lab/Credit
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## I. General Education Courses

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3

**Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76**

## II. Technical Core Courses

### A. Major Core

EGR	125	Appl Software for Tech	1	2	2
ISC	112	Industrial Safety	2	0	2

### III. Concentration

ATR	112	Intro to Automation	2	3	3
DFT	119	Basic CAD	1	2	2
ELC	128	Intro to PLC	2	3	3
ELC	130	Advanced Motors/Controls	2	2	3
ELC	131	Circuit Analysis I	3	3	4
ELC	213	Instrumentation	3	2	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
MEC	130	Mechanisms	2	2	3
PHY	131	Physics-Mechanics	3	2	4

## IV. Other Major Courses

Take 3 credits

WBL	120	Career Readiness/Explore/Employ.	2	3	3
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Take 17 credits

BPR	135	Schematics and Diagrams	2	0	2
CIS	110	Introduction to Computers	2	2	3
EGR	150	Introduction to Engineering	1	2	2
ELC	115	Industrial Wiring	2	6	4
MNT	110	Intro to Maintenance Processes	1	3	2
PCI	264	Process Controls with PLC's	3	3	4
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4

WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

#### V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 69**

### *Recommended Semester Schedule*

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
ATR	112	Intro to Automation	2	3	3
EGR	125	Appl. Software for Tech	1	2	2
ELC	131	Circuit Analysis	3	3	4
HYD	110	Hydraulics/Pneumatics	2	3	3
ISC	112	Industrial Safety	1	0	2

#### **First Year-Spring**

BPR	135	Schematics and Diagrams	2	0	2
CIS	110	Introduction to Computers	3	0	3
DFT	119	Basic CAD	1	2	2
ELC	128	Intro to PLC	2	3	3
ENG	111	Writing and Inquiry	3	0	3
MNT	110	Intro to Maintenance Processes	1	3	2

#### **First Year-Summer**

MAT	121	Algebra/Trigonometry I	2	2	3
Social Science Elective – see page75			3	0	3
Humanities/Fine Arts Elective – see list on page75			3	0	3

#### **Second Year-Fall**

ELC	130	Adv Motors/Controls	2	2	3
ELC	213	Instrumentation	3	2	4
MEC	130	Mechanisms	2	2	3
PCI	264	Process Controls with PLC's	3	3	4

#### **Second Year-Spring**

COM	231	Public Speaking	3	0	3
EGR	150	Intro to Engineering	1	2	2
ELC	115	Industrial Wiring	2	6	4
PHY	131	Physics – Mechanics	3	2	4
WBL	120	Career Readiness/Explore/Employ.	2	3	3

**Note:** WBL 111, 112, 113, 114, 121, 122, 123, 124, 131, 132, 133, 134, 211, 212, 213, 214 may count for any of the following:  
MNT 110, BPR 135, PCI 264, EGR 150, ELC 115

### ***Diploma Program (D40350)***

#### **I. General Education Courses**

ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3

#### **II. Major Courses**

##### **A. Core Courses**

ATR	112	Intro to Automation	2	3	3
DFT	119	Basic CAD	1	2	2
EGR	125	Appl. Software for Tech	1	2	2
ELC	128	Intro to PLC	2	3	3
ELC	131	Circuit Analysis I	3	3	4
ELC	213	Instrumentation	3	2	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
ISC	112	Industrial Safety	2	0	2
PHY	131	Physics – Mechanics	3	2	4

##### **III. Other Major Courses**

MNT	110	Intro to Maintenance Processes	1	3	2
WBL	120	Career Readiness/Explore/Employ.	2	3	3
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

##### **IV. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
<b>Total Credits:</b>			<b>39</b>		

### ***Recommended Semester Schedule***

#### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
EGR	125	Appl. Software for Tech	1	2	2
ELC	131	Circuit Analysis	3	3	4
HYD	110	Hydraulics/Pneumatics	2	3	3
ISC	112	Industrial Safety	1	0	2

**First Year-Spring**

DFT	119	Basic CAD	1	2	2
ELC	128	Intro to PLC	2	3	3
MNT	110	Intro to Maintenance Processes	1	3	2
PHY	131	Physics – Mechanics	3	2	4

**First Year-Summer**

ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3

**Second Year-Fall**

ATR	112	Intro to Automation	2	3	3
ELC	213	Instrumentation	3	2	4
WBL	120	Career Readiness/Explore/Employ.	2	3	3

***Certificate Program (C40350)*****I. Major Courses**

ATR	112	Intro to Automation	2	3	3
DFT	119	Basic CAD	1	2	2
EGR	125	Appl Software for Tech	1	2	2
HYD	110	Hydraulics/Pneumatics I	2	3	3

**II. Other Major Courses**

CIS	110	Introduction to Computers	2	2	3
EGR	150	Introduction to Engineering	1	2	2
MNT	110	Intro to Maintenance Processes	1	3	2

**Total Credits: 17*****Recommended Semester Schedule*****First Year-Fall**

ATR	112	Intro to Automation	2	3	3
EGR	125	Appl Software for Tech	1	2	2
HYD	110	Hydraulics/Pneumatics	2	3	3

**First Year-Spring**

CIS	110	Introduction to Computers	2	2	3
DFT	119	Basic CAD	1	2	2
EGR	150	Introduction to Engineering	1	2	2
MNT	110	Intro to Maintenance Processes	1	3	2

# Nurse Aide

C45840 (Certificate)

The Nurse Aide curriculum prepares individuals to work under the supervision of licensed nursing professionals in performing nursing care and services for persons of all ages.

Topics include growth and development, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management, family resources and services, and employment skills.

Upon completion, the student may be eligible for listing as a Nurse Aide I and other selected Nurse Aide registries as determined by the local program of study.

Please visit the McDowell Technical Community College website for current admission information:

<http://www.mcdowelltech.edu>, then click Academics, Academic Departments, Nursing

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

<u>Title</u>			<u>Class/Lab/Clinical/Credit</u>			
<b>I. Major Courses</b>						
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3
NAS	101	Nurse Aide I	3	4	3	6
NAS	102	Nurse Aide II	3	2	6	6

**Total Credits: 18**

## *Recommended Semester Schedule*

### **First Year-Fall**

NAS	101	Nurse Aide I	3	4	3	6
MED	121	Medical Terminology I	3	0	0	3

### **First Year-Spring**

NAS	102	Nurse Aide II	3	2	6	6
MED	122	Medical Terminology II	3	0	0	3

# *Associate Degree Nursing, Non-Integrated*

A45110 (Associate Degree)

The Associate Degree Nursing curriculum provides knowledge, skills, and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment, and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement, and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

## ***Program Student Learning Outcomes***

Graduates will be able to:

1. Advocate for patients and families in ways that promote their self-determination, integrity, and ongoing growth as human beings.
2. Make judgements in practice, substantiated with evidence that integrates nursing science in the provision of safe, quality care and that promote the health of patients within a family and community context.
3. Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving identity as a nurse committed to evidence-based practice, caring, advocacy, and safe, quality care for diverse patients within a family and community context.
4. Examine the evidence that underlines clinical nursing practice to challenge the status quo, question underlying assumptions, and offer new insights to improve the quality of care for patients, families, and communities.

## ***Foothills Nursing Consortium***

The Foothills Nursing Consortium includes:

McDowell Technical Community College, Marion  
Cleveland Community College, Shelby  
Isothermal Community College, Spindale and

The Foothills Nursing Consortium (FNC), Associate Degree Nursing (AD Nursing) program is approved by the NC Community College System Office and the NC Board of Nursing.

Characteristics of the AD Nursing program:

- a) will prepare students to apply to sit for the National Council Licensure Examination (NCLEX-RN) which is required to practice as a registered nurse.
- b) is designed for five sequential semesters in length.
- c) will be separate from the existing practical nurse programs in the above colleges.

Isothermal Community College is the administrative unit and the central location of the three colleges. The commuting time to the administrative unit from the other two colleges is approximately 30 minutes or twenty miles. This means that the greatest distance between the consortium colleges is approximately one hour or 50 miles.

Nursing classes will be held on all three campuses at some period of time during the program. When possible, non-nursing courses will be scheduled on the campus of the student's county of residence.

Please visit the McDowell Technical Community College website for the complete admission packets for generic and advanced placement entries:

***<http://www.mcdowelltech.edu>, then click Academics, Academic Departments, Nursing***

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

### I. General Education Courses

BIO	168	Anatomy and Physiology I	3	3	0	4
BIO	169	Anatomy and Physiology II	3	3	0	4
BIO	175	General Microbiology	2	2	0	3
ENG	111	Writing and Inquiry	3	0	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
PSY	150	General Psychology	3	0	0	3
PSY	241	Developmental Psychology	3	0	0	3

Humanities Elective-Select one from the list below: 3 0 0 3

ART 111, ART 114, ART 115, MUS 110, MUS 112, PHI 215, PHI 240, or HUM 115

### II. Major Courses

NUR	111	Introduction to Health Concepts	4	6	6	8
NUR	112	Health-Illness Concepts	3	0	6	5
NUR	113	Family Health Concepts	3	0	6	5
NUR	114	Holistic Health Concepts	3	0	6	5
NUR	211	Health Care Concepts	3	0	6	5
NUR	212	Health System Concepts	3	0	6	5
NUR	213	Complex Health Concepts	4	3	15	10
NUR	214*	Nsg. Transition Concepts	3	0	3	4

\*LPN to ADN students: All LPN to ADN students must complete NUR-214. For LPN to ADN students only (LPN's completing the traditional, non-concept based Practical Nursing diploma will be required to complete NUR 211 in addition to NUR 214.)

### III. Other Required Courses - Select 1 credit hour

(Maximum of 7 shc for AAS, 4 shc for diploma and 1 shc for certificate)  
(Includes free electives, orientation, and/or study skills courses)

ACA	115	Success and Study Skills	0	2	0	1
ACA	122	College Transfer Success	0	2	0	1

**Total Credits: 70**

### *Recommended Semester Schedule*

**Students are not allowed to enroll in the NUR courses until formally accepted into the program. Please see admission requirements.**

#### First Year-Fall

ACA	115	College Student Success	0	2	0	1
BIO	168	Anatomy & Physiology I	3	3	0	4
NUR	111	Introduction to Health Concepts	4	6	6	8
PSY	150	General Psychology	3	0	0	3

#### First Year-Spring

BIO	169	Anatomy & Physiology II	3	3	0	4
NUR	112	Health-Illness Concepts (8 weeks)	3	0	6	5
NUR	211	Health Care Concepts (8 weeks)	3	0	6	5
NUR	214*	Nursing Transition Concepts	3	0	3	4

\*LPN to ADN students: All LPN to ADN students must complete NUR-214. For LPN to ADN students only (LPN's completing the traditional, non-concept based Practical Nursing diploma will be required to complete NUR 211 in addition to NUR 214.)

tion to NUR 214.)

**First Year-Summer**

ENG	111	Writing and Inquiry	3	0	0	3
NUR	114	Holistic Health Concepts	3	0	6	5
PSY	241	Developmental Psychology	3	0	0	3

**Second Year-Fall**

BIO	175	Microbiology	2	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	0	3
NUR	113	Family Health Concepts (8 weeks)	3	0	6	5
NUR	212	Health System Concepts (8 weeks)	3	0	6	5

**Second Year-Spring**

NUR	213	Complex Health Concepts	4	3	15	10
Humanities Elec.-See list on preceding page			3	0	0	3

**Total Credits: 70**



# *Office Administration:* *General Office Administration*

A25370A (Associate Degree) D25370A (Diploma) C25370A (Certificate)

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Associate Degree Program*

<u>Title</u>	<u>Class/Lab/Credit</u>
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### **I. General Education Courses**

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

### **II. Major Courses**

CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Admin. Capstone	2	2	3

### **III. Concentration**

OST	122	Office Computations	2	2	3
OST	236	Adv Word Processing	2	2	3
OST	286	Professional Development	3	0	3

### **IV. Other Major Courses**

Take 28 credits from this list:

ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communication	3	0	3
CTS	130	Spreadsheet	2	2	3
CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	153	Office Finance Solutions	2	2	3
OST	223	Administrative Office Transcription I	2	2	3

OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3
WEB	214	Social Media	2	2	3

#### IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 68**

#### *Recommended Semester Schedule*

##### **First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	131	Keyboarding	1	2	2
OST	164	Office Editing	3	0	3

##### **First Year-Spring**

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3

##### **First Year-Summer**

ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Humanities Elective-See list on page 75			3	0	3

##### **Second Year-Fall**

ACC	120	Principles of Financial Accounting	3	2	4
BUS	260	Business Communications	3	0	3
MKT	223	Customer Service	3	0	3
OST	236	Advanced Word Processing	3	0	3

##### **Second Year-Spring**

CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	286	Professional Development	3	0	3

##### **Second Year-Summer**

COM	231	Public Speaking	3	0	3
OST	289	Office Administration Capstone	2	2	3
Social Sciences Elective-See list under required courses			3	0	3

### *General Office Administrative Diploma Program (D25370A)*

Title	Class/Lab/Credit
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#### **I. General Education Courses**

ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

## II. Major Courses

### 1. Required Courses

OST	164	Text Editing Applications	3	0	3
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3

## III. Concentration Requirements

OST	122	Office Computations	2	2	3
OST	236	Advanced Word Processing	2	2	3
OST	286	Professional Development	3	0	3

## IV. Other Major Courses

(A total of 9 Semester Hours must be selected from identified prefixes)

BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communications	3	0	3
CTS	130	Spreadsheet	2	2	3
CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	223	Administrative Office Transcription I	2	2	3
OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3
WEB	214	Social Media	2	2	3

## IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 40**

## *Recommended Semester Schedule*

### First Year-Fall

ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3

### First Year-Spring

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	184	Records Management	2	2	3
OST	236	Advanced Word Processing	2	2	3
OST	286	Professional Development	3	0	3

### First Year-Summer

DBA	110	Database Concepts	2	3	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
OST	289	Office Administration Capstone	2	2	3

## *General Office Administrative Certificate (C25370A)*

Title			Class/Lab/Credit		
<b>I. Major Courses</b>					
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Systems Management	2	2	3
<b>II. Other Required Course</b>					
ACA	115	Success and Study Skills	0	2	1
<b>Total Credits: 16</b>					
<b>First Year-Fall</b>					
ACA	115	Success and Study Skills	0	2	1
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
<b>First Year-Spring</b>					
CIS	110	Introduction to Computers	2	2	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3

# Office Administration: Office Finance

A25370B (Office Finance Associate Degree)

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## *Associate Degree Program*

Title	Class/Lab/Credit
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### **I. General Education Courses**

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

### **II. Major Courses**

CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3

### **III. Concentration**

ACC	120	Principles of Financial Accounting	3	2	4
OST	122	Office Computations	2	2	3
OST	153	Office Finance Solutions	2	2	3

### **IV. Other Major Courses**

Take 28 credits from this list:

BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communications	3	0	3
CTS	130	Spreadsheet	2	2	3
CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	223	Administrative Office Transcription I	2	2	3
OST	236	Advanced Word Processing	2	2	3
OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3
OST	286	Professional Development	3	0	3
WEB	214	Social Media	2	2	3

**IV. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 69*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	164	Office Editing	3	0	3

**First Year-Spring**

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3

**First Year-Summer**

ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Humanities Elective-See list on page 75			3	0	3

**Second Year-Fall**

ACC	120	Principles of Financial Accounting	3	2	4
BUS	260	Business Communications	3	0	3
MKT	223	Customer Service	3	0	3
OST	236	Advanced Word Processing	3	0	3

**Second Year-Spring**

CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
OST	153	Office Finance Solutions	2	2	3
OST	286	Professional Development	3	0	3

**Second Year-Summer**

COM	231	Public Speaking	3	0	3
OST	289	Office Administration Capstone	2	2	3
Social Sciences Elective-See list under required courses			3	0	3

# Office Administration: Office Software

A25370C (Office Software Associate Degree)

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

## Associate Degree Program

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.					
<b>II. Major Courses</b>					
CIS	110	Introduction to Computers	2	2	3
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
OST	184	Records Management	2	2	3
OST	289	Office Administration Capstone	2	2	3
<b>III. Concentration</b>					
CTS	130	Spreadsheet	2	2	3
DBA	110	Database Concepts	2	3	3
OST	236	Advanced Word Processing	2	2	3
<b>IV. Other Major Courses</b>					
Take 28 credits from this list:					
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introduction to Business	3	0	3
BUS	260	Business Communications	3	0	3
CTS	135	Integrated Software Intro	2	4	4
MED	121	Medical Terminology I	3	0	3
MED	122	Medical Terminology II	3	0	3
MKT	223	Customer Service	3	0	3
OST	122	Office Computations	2	2	3
OST	131	Keyboarding	1	2	2
OST	134	Text Entry and Formatting	2	2	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	153	Office Finance Solutions	2	2	3
OST	223	Administrative Office Transcription I	2	2	3
OST	241	Medical Office Transcription I	2	2	3
OST	242	Medical Office Transcription II	2	2	3
OST	286	Professional Development	3	0	3
WEB	214	Social Media	2	2	3

**IV. Other Required Courses**

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 68*****Recommended Semester Schedule*****First Year-Fall**

ACA	115	Success and Study Skills	0	2	1
CIS	110	Introduction to Computers	2	2	3
OST	122	Office Computations	2	2	3
OST	131	Keyboarding	1	2	2
OST	164	Office Editing	3	0	3

**First Year-Spring**

CTS	130	Spreadsheet	3	2	3
OST	134	Text Entry and Formatting	2	2	3
OST	136	Word Processing	2	2	3
OST	184	Records Management	2	2	3

**First Year-Summer**

ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	3	0	3
Humanities Elective-See list on page 76			3	0	3

**Second Year-Fall**

ACC	120	Principles of Financial Accounting	3	2	4
BUS	260	Business Communications	3	0	3
MKT	223	Customer Service	3	0	3
OST	236	Advanced Word Processing	3	0	3

**Second Year-Spring**

CTS	135	Integrated Software Intro	2	4	4
DBA	110	Database Concepts	2	3	3
OST	135	Advanced Text Entry and Formatting	2	2	3
OST	286	Professional Development	3	0	3

**Second Year-Summer**

COM	231	Public Speaking	3	0	3
OST	289	Office Administration Capstone	2	2	3
Social Sciences Elective-See list under required courses			3	0	3



# Photographic Technology

A30280 (Associate Degree) C30280 (Certificate)

This curriculum offers training in photographic techniques and their application in professional photographic disciplines. Where offered, students will receive comprehensive course work in four areas of concentration: Photojournalism, Commercial Photography and Portrait Studio Management.

Special emphasis is placed on developing skills in the following areas: fundamentals of camera systems, lighting, photographic process, digital imaging, design and business practices.

Graduates should qualify for entry level jobs in the diverse photographic industry. Employment opportunities exist in the following areas: commercial photography, photojournalism, biomedical photography, portrait, photographic equipment sales, photographic laboratories, and imaging technologies; dependant upon courses offered and completed.

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

*\*This curriculum was designed to be entered in the fall of each year. Some classes may not be offered every semester.*

Title	Class/Lab/Credit
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## I. General Education Courses

COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

## II. Major Courses

PHO	110	Fundamentals of Photography	3	6	5
PHO	115	Basic Studio Lighting	2	6	4
PHO	139	Intro. to Digital Imaging	1	3	2
PHO	224	Multimedia Production	2	3	3

## III. Concentration

PHO	113	History of Photography	3	0	3
PHO	217	Photojournalism I	1	6	4
PHO	226	Portraiture	3	3	4
PHO	235	Commercial Photography	2	4	4

## IV. Other Major Courses (Must be selected from identified prefixes)

### Group I- Take 22 Hours:

PHO	120	Intermediate Photography	2	4	4
PHO	132	Small Format Photography	2	6	4
PHO	140	Digital Photo Imaging I	2	4	4
PHO	150	Portfolio Development I	3	3	4
PHO	180	Creative Problem Solving	1	4	3
PHO	220	Business of Photography	3	0	3
PHO	222	Video Production	2	2	3

### Group II- Take 3 Hours:

BUS	110	Introduction To Business	3	0	3
BUS	125	Personal Finance	3	0	3
BUS	230	Small Business Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
GRD	151	Computer Design Basics	1	4	3
WBL	111	Work-Based Learning	0	10	1

WEB	115	Web Markup & Scripting	2	2	3
WEB	210	Web Design	2	2	3
WEB	214	Social Media	2	2	3

#### V. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 70**

### *Recommended Semester Schedule*

#### First Year-Fall

ACA	115	Success and Study Skills	0	2	1
COM	231	Public Speaking	3	0	3
PHO	110	Fundamentals of Photography	3	6	5
PHO	113	History of Photography	3	0	3
PHO	139	Introduction to Digital Imaging	1	3	2

#### First Year-Spring

PHO	115	Basic Studio Lighting	2	6	4
PHO	120	Intermediate Photography	2	4	4
PHO	132	Small Format Photography	2	6	4
PHO	220	Business of Photography	3	0	3

#### First Year-Summer

BUS	110	Introduction To Business	3	0	3
ENG	111	Writing and Inquiry	3	0	3
Humanities Elective-See list on page 75			3	0	3

#### Second Year-Fall

PHO	140	Digital Photo Imaging I	2	4	4
PHO	222	Video Production	2	2	3
PHO	224	Multimedia Production	2	3	3
PHO	226	Portraiture	3	3	4

#### Second Year-Spring

PHO	150	Portfolio Development I	3	3	4
PHO	217	Photojournalism	1	6	4
PHO	235	Commercial Photography	2	4	4

#### Second Year-Summer

MAT	143	Quantitative Literacy	2	2	3
**Recommended for transfer to four-year colleges					
Social Science Elective-See list on page 75			3	0	3

### *Certificate Program (C30280)*

Title	Class/Lab/Credit
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#### I. Major Courses

PHO	110	Fundamentals of Photography	3	6	5
PHO	115	Basic Studio Lighting	2	6	4
PHO	139	Introduction to Digital Imaging	1	3	2

#### II. Other Major Courses

PHO	120	Intermediate Photography	2	4	4
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### III. Other Requirements

ACA	115	Success and Study Skills	0	2	1
<b>Total Credits: 16</b>					

### *Recommended Semester Schedule*

#### **First Year-Fall**

PHO	110	Fundamentals of Photography	3	6	5
PHO	139	Intro. to Digital Imaging	1	3	2
ACA	115	Success and Study Skills	0	2	1

#### **First Year-Spring**

PHO	115	Basic Studio Lighting	2	6	4
PHO	120	Intermediate Photography	2	4	4

# *Practical Nursing Education*

D45660 (Diploma)

The Practical Nursing curriculum provides knowledge and skills to integrate safety and quality into nursing care to meet the needs of the holistic individual which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes safe, individualized nursing care and participation in the interdisciplinary team while employing evidence-based practice, quality improvement, and informatics.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN) which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

## **Practical Nursing Curriculum Educational Outcomes**

Upon completion of the Practical Nursing program, the graduate will:

- 1) Participate in evaluating the concepts of the holistic individual and client response in the promotion of health, wellness, illness, quality of life, and the achievement of potential.
- 2) Practice professional nursing behaviors, within the ethical-legal practice boundaries of the LPN, incorporating personal responsibility and accountability for continued competence.
- 3) Participate in providing evidence-based nursing care, from an established plan of care, based on biophysical, psychosocial and cultural needs of clients in various stages of growth and development while assisting them to attain their highest level of wellness.
- 4) Reinforce and/or implement the teaching plan developed and delegated by the registered nurse to promote the health of individuals, incorporating teaching and learning principles.
- 5) Participate in the nursing process to provide individualized, safe and effective nursing care in a structured setting under supervision.
- 6) Demonstrate caring behaviors in implementing culturally-competent, client-centered nursing care to diverse clients across the life span.
- 7) Participate in Quality Improvement (QI) by identifying hazards and errors and by suggesting, to the RN, changes to improve the client care process.
- 8) Utilize informatics to access, manage, and communicate client information.
- 9) Participate in collaboration with the interdisciplinary healthcare team, as assigned by the registered nurse, to support positive individual and organizational outcomes in a safe and cost effective manner.

Please visit the McDowell Technical Community College Health Science website for current admission information:

**[http://www.mcdowelltech.edu/health\\_science.html](http://www.mcdowelltech.edu/health_science.html)**

**In addition to the courses listed below, students may be required to take transition/co-requisite classes based on RISE criteria. These classes do not count toward hours required for graduation.**

Title			Class/	Lab/	Clinical/	Credits
<b>I. General Education Courses</b>						
ENG	111	Writing and Inquiry	3	0	0	3
PSY	150	General Psychology	3	0	0	3
<b>II. Major Courses</b>						
NUR	101	Practical Nursing I	7	6	6	19
NUR	102	Practical Nursing II	7	0	9	16
NUR	103	Practical Nursing III	6	0	9	15
<b>III. Other Major Courses</b>						
BIO	168	Anatomy & Physiology I	3	3	0	6
BIO	169	Anatomy & Physiology II	3	3	0	6
<b>IV. Other Required Courses</b>						
ACA	115	Success and Study Skills	0	2	0	2
<b>Total Credits:</b>			<b>45</b>			

### *Recommended Semester Schedule*

Fall Semester			Class Lab Clinical Credit			
ACA	115	Success and Study Skills	0	2	0	1
BIO	168	Anatomy & Physiology I	3	3	0	4
NUR	101	Practical Nursing I	7	6	6	11
PSY	150	General Psychology	3	0	0	3
<b>Spring Semester</b>						
BIO	169	Anatomy & Physiology II	3	3	0	4
ENG	111	Writing and Inquiry	3	0	0	3
NUR	102	Practical Nursing II	7	0	9	10
<b>Summer Semester</b>						
NUR	103	Practical Nursing III	6	0	9	9

# Welding Technology

## D50420 (Diploma) C50420 (Certificate)

This curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metal industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses in math, blueprint reading, metallurgy, welding inspection, and destructive and non-destructive testing provides the student with industry-standard skills developed through classroom training and practical application.

Successful graduates of the Welding Technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

**In addition to the courses listed below, students may be required to take developmental classes based on their placement test scores. These classes do not count toward hours required for graduation.**

### *Diploma Program*

Title			Class/Lab/Credit		
<b>I. General Education Courses</b>					
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
<b>II. Major Courses</b>					
WLD	110	Cutting Processes	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4
WLD	131	GTAW (TIG) Plate	2	6	4
WLD	141	Symbols & Specifications	2	2	3
<b>III. Other Major Courses</b> (Must be selected from identified prefixes)					
Take 3 credits					
WBL	120	Career Readiness/Explore/Employ.	2	3	3
Take 15 credits					
CIS	110	Introduction to Computers	3	0	3
WLD	112	Basic Welding	1	3	2
WLD	116	SMAW (Stick) Plate/Pipe	1	9	4
WLD	151	Fabrication I	2	6	4
WLD	261	Certification Practices	1	3	2
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	113	Work-Based Learning I	0	0	3
WBL	114	Work-Based Learning I	0	0	4
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	123	Work-Based Learning II	0	0	3
WBL	124	Work-Based Learning II	0	0	4
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	133	Work-Based Learning III	0	0	3
WBL	134	Work-Based Learning III	0	0	4
WBL	211	Work-Based Learning IV	0	0	1

WBL	212	Work-Based Learning IV	0	0	2
WBL	213	Work-Based Learning IV	0	0	3
WBL	214	Work-Based Learning IV	0	0	4

#### IV. Other Required Courses

ACA	115	Success and Study Skills	0	2	1
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**Total Credits: 43**

### *Recommended Semester Schedule*

\*The knowledge and skills learned in welding classes often builds upon information from previous classes. It is preferable, therefore, for students to take welding classes in the recommended course sequence. WLD 115 should be the first welding course, for example; WLD 110 should be the second. Following the recommended course sequence will allow students to complete their degree in the easiest and most logical sequence.

#### First Year-Fall

ACA	115	Success and Study Skills	0	2	1
WLD	112	Basic Welding	1	3	2
WLD	141	Symbols & Specifications	2	2	3

#### First Year-Spring

WLD	110	Cutting Processes	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	131	GTAW (TIG) Plate	2	6	4

#### First Year-Summer

ENG	101	Applied Communications	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3

#### Second Year-Fall

WLD	116	SMAW (Stick) Plate/Pipe	1	9	4
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4

#### Second Year-Spring

CIS	110	Introduction to Computers	3	0	3
WBL	120	Career Readiness/Explore/Employ.	2	3	3
WLD	151	Fabrication I	2	6	4
WLD	261	Certification Practices	1	3	2

**Note:** WBL 111, 112, 113, 114, 121, 122, 123, 124, 131, 132, 133, 134, 211, 212, 213, 214 may count for any of the following: WLD 112, WLD 116, WLD 151, WLD 261

### *Certificate Program (C50420)*

Title	Class/Lab/Credit
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#### I. Major Courses

WLD	110	Cutting Processes*	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4
WLD	131	GTAW (TIG) Plate	2	6	4
WLD	141	Symbols & Specifications	2	2	3

**Total Credits: 18**

\*WLD 112 may be substituted for WLD 110 with advisor approval

### ***Recommended Semester Schedule***

#### **First Year-Fall**

\*Option: Student Takes WLD 110 or WLD 112

WLD	112	Basic Welding*	1	3	2
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4
WLD	141	Symbols & Specifications	2	2	3

#### **First Year-Summer**

\*Option: Student Takes WLD 110 or WLD 112

WLD	110	Cutting Processes *	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	131	GTAW (TIG) Plate	2	6	4

\*WLD 112 may be substituted for WLD 110 with advisor approval



# Course Descriptions

Classes labeled “\*VLC” are available through the Virtual Learning Community (VLC).

## Academic Related

### ACA 115 Success & Study Skills

0 2 1

Prerequisites: None

Corequisites: None

This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals. (\*VLC)

### ACA 122 College Transfer Success

0 2 1

Prerequisites: None

Corequisites: None

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### ACA 220 Professional Transition

1 0 1

Prerequisites: None

Corequisites: None

This course provides preparation for meeting the demands of employment or education beyond the community college experience. Emphasis is placed on strategic planning, gathering information on workplaces or colleges, and developing human interaction skills for professional, academic, and/or community life. Upon completion, students should be able to successfully make the transition to appropriate workplaces or senior institutions.

## Accounting

### ACC 120 Prin of Financial Accounting

3 2 4

Prerequisites: None

Corequisites: None

This course introduces business decision-making accounting information systems. Emphasis is placed on analyzing, summarizing, reporting and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*

### ACC 121 Prin of Managerial Accounting

3 2 4

Prerequisites: ACC 120

Corequisites: None

This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*

### ACC 129 Individual Income Taxes

2 2 3

Prerequisites: None

Corequisites: None

This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms. (VLC)

### ACC 130 Business Income Taxes

2 2 3

Prerequisites: None

Corequisites: None

This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms.

### ACC 140 Payroll Accounting

1 2 2

Prerequisites: ACC 115 or ACC 120

Corequisites: None

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology. *This course is also available through the Virtual Learning Community (VLC).*

### ACC 150 Accounting Software Applications

1 2 2

Prerequisites: ACC 115 or ACC 120

Corequisites: None

This course introduces microcomputer applications related to the major accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems. *This course is also available through the Virtual Learning Community (VLC).*

### ACC 180 Practices in Bookkeeping

3 0 3

Prerequisites: ACC 120

Corequisites: None

This course provides advanced instruction in bookkeeping and record-keeping functions. Emphasis is placed on mastering adjusting entries, correction of errors, depreciation, payroll, and inventory. Upon completion, students should be able to conduct all key bookkeeping functions for small business.

### ACC 220 Intermediate Accounting I

3 2 4

Prerequisites: ACC 120

Corequisites: None

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and an extensive analyses of financial statements. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

### ACC 221 Intermediate Accounting II

3 2 4

Prerequisites: ACC 220

Corequisites: None

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

### ACC 227 Practices in Accounting

3 0 3

Prerequisites: ACC 220

Corequisites: None

This course provides an advanced in-depth study of selected topics in accounting using case studies and individual and group problem solving. Topics include cash flow, financial statement analysis, individual and group problem solving, practical approaches to dealing with clients, ethics and critical thinking. Upon completion, students should be able to demonstrate competent analytical skills and effective communication of their analysis in written and/or oral presentations.

### ACC 240 Gov & Not-for-Profit Acctg

3 0 3

Prerequisites: ACC 121

Corequisites: None

This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

### ACC 250 Adv Accounting

3 0 3

Prerequisites: ACC 220

Corequisites: None

This course is designed to analyze special accounting issues, which may include business combinations, partnerships, international accounting, estates, and trusts. Emphasis is placed on analyzing transactions and preparing working papers and financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures.

**ACC 269 Audit & Assurance Services**

3 0 3

Prerequisites: ACC 220

Corequisites: None

This course introduces selected topics pertaining to the objectives, theory and practices in engagements providing auditing and other assurance services. Topics will include planning, conducting and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology.

## *Air Conditioning, Heating, and Refrigeration*

**AHR 110 Intro to Refrigeration**

2 6 5

Prerequisites: None

Corequisites: None

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

**Competencies****Student Learning Outcomes**

1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
2. Identify and explain the theory, operating principle, and components of the refrigeration cycle.
3. Identify tools, materials, and equipment used in the refrigeration industry.
4. Evacuate, charge, recover, and safely operate a basic refrigeration /cooling system in accordance with EPA regulations.
5. Demonstrate refrigeration piping and soldering techniques.

**AHR 111 HVACR Electricity**

2 2 3

Prerequisites: None

Corequisites: None

This course introduces electricity as it applies to HVACR equipment. Emphasis is placed on power sources, interaction of electrical components, wiring of simple circuits, and the use of electrical test equipment. Upon completion, students should be able to demonstrate good wiring practices and the ability to read simple wiring diagrams.

**Competencies****Student Learning Outcomes**

1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment

covered in the course.

2. Be able to use electrical test instruments.
3. Demonstrate knowledge of electricity as applied to heating, ventilation, air conditioning and refrigeration machines.
4. Identify the various electrical components used in HVAC equipment and explain their operation.
5. Use Ohm's Law to calculate the current, voltage, and resistance in a circuit.
6. Draw and interpret wiring schematics for installation and troubleshooting.
7. Follow systematic troubleshooting procedure to diagnose electrical problems and control circuit problems.

**AHR 112 Heating Technology**

2 4 4

Prerequisites: None

Corequisites: None

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

**Competencies****Student Learning Outcomes**

1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
2. Use industry terminology to describe principles for oil, gas, and electric warm air heating systems.
3. Identify the major components of oil, gas, and electric heating systems.
4. Install and start-up warm air heating systems.
5. Identify various types of energy sources used in heating and describe the individual characteristics of each.
6. Describe service procedures for heating systems.
7. Use tools and instruments necessary to troubleshoot and test system efficiency.

**AHR 113 Comfort Cooling**

2 4 4

Prerequisites: None

Corequisites: None

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychometrics, manufacturer specifications, and test instruments to determine proper system operation.

**Competencies****Student Learning Outcomes**

1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
2. Evaluate system operation using psychometrics, manufacturer specifications, and test instruments.
3. Demonstrate methods of installing, testing, maintaining, and repairing comfort cooling systems.
4. Demonstrate use of test equipment and interpretation of test equipment results.
5. Identify refrigerants used in residential and light commercial comfort cooling systems and demonstrate the proper procedures for handling these refrigerants.

**AHR 114 Heat Pump Technology**

2 4 4

Prerequisites: AHR 110 or AHR 113

Corequisites: None

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures

**Student Learning Outcomes**

1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
2. Diagram refrigerant flow through a heat pump in both the heating and cooling mode identifying refrigerant conditions and pressures.
3. Explain the defrost cycle for air-to-air heat pumps.
4. Identify and troubleshoot electrical control system components for heat pumps.
5. Identify and troubleshoot refrigeration system components for heat pumps.
6. Identify and describe the different types of heat pumps in relation to their source of heat.

**AHR 115 Refrigeration Systems**

1 3 2

Prerequisites: AHR 110

Corequisites: None

This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

**AHR 120 HVACR Maintenance**

1 3 2

Prerequisites: None

Corequisites: None

This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

**AHR 125 HVAC Electronics**

1 3 2

Prerequisites:

Take one: AHR 111, ELC 111, or ELC 112

Corequisites: None

This course introduces the common electronic control components in HVAC systems. Emphasis is placed on identifying electronic components and their functions in HVAC systems and motor-driven control circuits. Upon completion, students should be able to identify components, describe control circuitry and functions, and use test instruments to measure electronic circuit values and identify malfunctions.

**AHR 130 HVAC Controls**

2 2 3

Prerequisites:

Take one: AHR 111, ELC 111, or ELC 112

Corequisites: None

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

**AHR 135 Transport Refrigeration**

2 6 4

Prerequisites: AHR 110

Corequisites: None

This course introduces the equipment and components commonly found in commercial transport refrigeration systems. Topics include compressors, evaporators, metering devices, accessories, and related electrical components. Upon completion, students should be able to safely maintain, troubleshoot, and repair transport refrigeration components.

**AHR 160 Refrigerant Certification**

1 0 1

Prerequisites: None

Corequisites: None

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

**AHR 180 HVACR Customer Relations**

1 0 1

Prerequisites: None

Corequisites: None

This course introduces common business and customer relation practices that may be encountered in HVACR. Topics include business practices, appearance of self and vehicle, ways of handling customer complaints, invoices, telephone communications, and warranties. Upon completion, students should be able to present themselves to customers in a professional manner, understand how the business operates, complete invoices, and handle complaints.

**AHR 210 Residential Building Code**

1 2 2

Prerequisites: None

Corequisites: None

This course covers the residential building codes that are applicable to the design and installation of HVAC systems. Topics include current residential codes as applied to HVAC design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of residential building codes that apply to specific areas of the HVAC trade.

**AHR 211 Residential System Design**

2 2 3

Prerequisites: None

Corequisites: None

This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

**AHR 212 Advanced Comfort Systems**

2 6 4

Prerequisites: AHR 114

Corequisites: None

This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps, and

high efficiency heat pumps.

Competencies

Student Learning Outcomes

1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
2. Identify components of water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pumps.
3. Compare and contrast standard and high efficiency heat pumps.
4. Design and size earth coupled piping loops for geothermal heat pump systems.
5. Describe geothermal heat pump operation.
6. Test duct systems for proper airflow and make adjustments.

**AHR 213 HVACR Building Code**

1 2 2

Prerequisites: None

Corequisites: None

This course covers the North Carolina codes that are applicable to the design and installation of HVACR systems. Topics include current North Carolina codes as applied to HVACR design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of North Carolina codes that apply to specific areas of the HVACR trade.

Competencies

Student Learning Outcomes

1. Apply the mechanical, gas, and energy code of North Carolina for designing, installing, maintaining and servicing HVACR systems.
2. Define terms and abbreviations using codes applicable to the HVACR trade.
3. Analyze information to conform to North Carolina mechanical, gas, and energy code.
4. Describe sources of authority and methods of enforcement.

**AHR 235 Refrigeration Design**

2 2 3

Prerequisites: AHR 110

Corequisites: None

This course covers the principles of commercial refrigeration system operation and design. Topics include walk-in coolers, walk-in freezers, system components, load calculations, equipment selection, defrost systems, refrigerant line sizing, and electric controls. Upon completion, students should be able to design, adjust, and perform routine service procedures on a commercial refrigeration system.

**AHR 245 Chiller Systems**

1 3 2

Prerequisites: AHR 110

Corequisites: None

This course introduces the fundamentals of liquid chilling equipment. Topics include characteristics of water, principles of water chilling, the chiller, the refrigerant, water and piping circuits, freeze prevention, purging, and equipment flexibility. Upon completion, students should be able to describe the components, controls, and overall operation of liquid chilling equipment and perform basic maintenance tasks.

**Art****ART 111 Art Appreciation**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. (\*VLC)*

**ART 114 Art History Survey I**

3 0 3

Prerequisites: None

Corequisites: None

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

**ART 115 Art History Survey II**

3 0 3

Prerequisites: None

Corequisites: None

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

**ART 121 Two-Dimensional Design**

0 6 3

Prerequisites: None

Corequisites: None

This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**ART 171 Digital Design I**

0 6 3

Prerequisites: None

Corequisites: None

This course is designed to introduce students to the elements and principles of design through the use of digital software. Emphasis is placed on developing composition and design skills using vector, raster, and time-based media. Upon completion, students should be able to identify and use tools in digital software, understand and utilize digital and artistic vocabulary, and employ the principles and elements of design to create artwork using digital means. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**ART 275 Introduction to Graphic Design**

0 6 3

Prerequisites: None

Corequisites: None

This course introduces students to the field of graphic design. Emphasis is placed on the basic concepts of visual communication, the design process and the ability to evaluate and discuss design issues in a



critical manner. Upon completion, students should be able to use contemporary design software and visual language techniques as they apply to creative visual problem-solving involving typography, image manipulation, symbolic representation and page management while being responsive to the relationship between client, designer and audience. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

## American Sign Language

### ASL 111 Elementary ASL I

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of American Sign Language within a cultural context. Emphasis is placed on the development of basic expressive and receptive skills. Upon completion, students will be able to comprehend and respond with grammatical accuracy to expressive American Sign Language and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

### ASL 112 Elementary ASL II

3 0 3

Prerequisites: ASL 111

Corequisites: None

This course is a continuation of ASL 111 focusing on the fundamental elements of American Sign Language in a cultural context. Emphasis is placed on the progressive development of expressive and receptive skills. Upon completion, the students should be able to comprehend and respond with increasing accuracy to expressive American Sign Language and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

### ASL 181 ASL Lab I

0 2 1

Prerequisites: None

Corequisites: None

This course provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of basic expressive and receptive skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to expressive American Sign Language and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

### ASL 182 ASL Lab II

0 2 1

Prerequisites: ASL 181

Corequisites: None

This course provides an opportunity to enhance acquisition of the fundamental elements of American Sign Language. Emphasis is placed on the progressive development of basic expressive and receptive skills through the use of supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to expressive American Sign Language and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/*

Fine Arts.

## Astronomy

### AST 151 General Astronomy I

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

### AST 151A General Astronomy I Lab

0 2 1

Prerequisites: None

Corequisites: AST 151

The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

### AST 152 General Astronomy II

3 0 3

Prerequisites: AST 151

Corequisites: None

This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

### AST 152A General Astronomy II Lab

0 2 1

Prerequisites: AST 151

Corequisites: AST 152

The course is a laboratory to accompany AST 152. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 152 and which provide practical experience. Upon completion, students should be able to demonstrate a working knowledge of astronomy. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

## Automation and Robotics

### ATR 112 Introduction to Automation

2 3 3

Prerequisites: None

Corequisites: None

This course introduces the basic principles of automated systems and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon comple-

tion, students should be able to understand the basic concepts of automation and robotic systems.

### ATR 212 Industrial Robots

2 3 3

Prerequisites: None

Corequisites: None

This course covers the operation of industrial robots. Topics include the classification of robots, activators, grippers, work envelopes, computer interfaces, overlapping work envelopes, installation, and programming. Upon completion, students should be able to install, program, and troubleshoot industrial robots.

## Automotive

### AUT 113 Automotive Servicing I

0 6 2

Prerequisites: None

Corequisites: None

This course is a lab used as an alternative to co-op placement. Emphasis is placed on shop operations, troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to perform a variety of automotive repairs using proper service procedures and to operate appropriate equipment.

### AUT 116 Engine Repair

2 3 3

Prerequisites: None

Corequisites: None

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

### AUT 116A Engine Repair Lab

0 3 1

Prerequisites: None

Corequisites: AUT 116

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

### AUT 141 Suspension & Steering Systems

2 3 3

Prerequisites: None

Corequisites: None

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

### AUT 141A Suspension & Steering Lab

Prerequisites: None

Corequisites: AUT 141

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

**AUT 151 Brake Systems**

2 3 3

Prerequisites: None

Corequisites: None

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

**AUT 151A Brakes Systems Lab**

0 3 1

Prerequisites: None

Corequisites: AUT 151

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

**AUT 161 Basic Auto Electricity**

4 3 5

Prerequisites: None

Corequisites: None

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

**AUT 181 Engine Performance I**

2 3 3

Prerequisites: None

Corequisites: None

This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

**AUT 181A Engine Performance I Lab**

0 3 1

Prerequisites: None

Corequisites: AUT 181

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include overviews of engine operation, ignition components and systems,

fuel delivery, injection components and systems and emission control devices and emerging engine performance technologies. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

**AUT 183 Engine Performance 2**

2 6 4

Prerequisites: AUT 181

Corequisites: None

This course covers study of the electronic engine control systems, the diagnostic process used to locate engine performance concerns, and procedures used to restore normal operation. Topics will include currently used fuels and fuel systems, exhaust gas analysis, emission control components and systems, OBD II (on-board diagnostics) and inter-related electrical/electronic systems. Upon completion, students should be able to diagnose and repair complex engine performance concerns using appropriate test equipment and service information.

**AUT 221 Auto Transmissions/Transaxles**

2 3 3

Prerequisites: None

Corequisites: None

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains.

**AUT 221A Auto Transm./Transaxles Lab**

0 3 1

Prerequisites: None

Corequisites: AUT 221

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains.

**AUT 231 Manual Trans/Ax/Drtrains**

2 3 3

Prerequisites: None

Corequisites: None

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, drive-shafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains.

**AUT 231A Manual Trans/Ax/Drtrains Lab**

0 3 1

Prerequisites: None

Corequisites: AUT 231

This course is an optional lab for the program that needs to meet NATEF hour standards but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains.

**Biology****BIO 111 General Biology I**

3 3 4

Prerequisites: None

Corequisites: None

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. (\*VLC)*

**BIO 112 General Biology II**

3 3 4

Prerequisites: BIO 111

Corequisites: None

This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. (\*VLC)*

**BIO 155 Nutrition**

3 0 3

Prerequisites: None

Corequisites: None

This course covers the biochemistry of foods and nutrients with consideration of the physiological effects of specialized diets for specific biological needs. Topics include cultural, religious, and economic factors that influence a person's acceptance of food as well as nutrient requirements of the various life stages. Upon completion, students should be able to identify the functions and sources of nutrients, the mechanisms of digestion, and the nutritional requirements of all age groups. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

**BIO 163 Basic Anatomy and Physiology**

4 2 5

Prerequisites: None

Corequisites: None

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

**BIO 168 Anatomy and Physiology I**

3 3 4

Prerequisites: None

Corequisites: None

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate

Class/Lab/Credit or Class/Lab/Exp./Credit

an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### BIO 169 Anatomy and Physiology II

3 3 4

Prerequisites: BIO 168

Corequisites: None

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

### BIO 175 General Microbiology

2 2 3

Prerequisites: BIO 110, BIO 111, BIO 163, BIO 165, or BIO 168

Corequisites: None

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

### BIO 275 Microbiology

3 3 4

Prerequisites: BIO 110, BIO 112, BIO 163, BIO 165, or BIO 168

Corequisites: None

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

## Blueprint Reading

### BPR 111 Print Reading

1 2 2

Prerequisite: None

Corequisites: None

This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

Competencies

Student Learning Outcomes

Class/Lab/Credit or Class/Lab/Exp./Credit

1. Interpret symbols, abbreviations, and line types.
2. Identify and describe types of projection and use of views.
3. Draw freehand sketches.
4. Calculate measurements of features.
5. Identify and interpret dimensioning and tolerancing.

### BPR 121 Blueprint Reading: Mechanical

1 2 2

Prerequisites: BPR 111 or MAC 131

Corequisites: None

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

### BPR 122 Blueprint Reading-Mechanical Advanced

1 2 2

Prerequisites: BPR 121 or MAC 132

Corequisites: None

This course covers the interpretation of advanced blueprints. Topics include working drawings of complex parts and the applications of GD & T. Upon completion, students should be able to interpret drawings of complex parts and mechanisms for features of fabrication, construction, and assembly.

### BPR 135 Schematics & Diagrams

2 0 2

Prerequisites: None

Corequisites: None

This course introduces schematics and diagrams used in a variety of occupations. Topics include interpretation of wiring diagrams, assembly drawings, exploded views, sectional drawings, and service manuals, specifications, and charts. Upon completion, students should be able to research and locate components and assemblies denoting factory specifications and requirements from service and repair manuals.

## Business

### BUS-110 Introduction to Business

3 0 3

Prerequisites: None

Corequisites: None

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

Competencies

Student Learning Outcomes

1. Identify various forms of business organizations.
  2. Define business vocabulary.
  3. Describe the basics of business ethics.
  4. Explain basic management principles.
- Competencies

### BUS 115 Business Law I

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the student to the legal and

Class/Lab/Credit or Class/Lab/Exp./Credit

ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement (\*VLC).*

Competencies

•Student Learning Outcomes

1. Identify the elements of a contract.
2. Describe the structure of the U.S. court system.
3. Identify laws, conditions and regulations in national and international work environments.

### BUS 125 Personal Finance

3 0 3

Prerequisites: None

Corequisites: None

This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

### BUS 135 Principles of Supervision

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the basic responsibilities and duties of the supervisor and his/her relationship to higher-level supervisors, subordinates, and associates. Emphasis is placed on effective utilization of the work force and understanding the role of the supervisor. Upon completion, students should be able to apply supervisory principles in the work place. (\*VLC)

### BUS 137 Principles of Management

3 0 3

Prerequisites: None

Corequisites: None

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. (\*VLC)*

Competencies

•Student Learning Outcomes

1. Explain strategic management in business operations.
2. Define management, quality management, and project management.
3. Identify relevant issues in human resource management.

### BUS 147 Business Insurance

3 0 3

Prerequisites: None

Corequisites: None

This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage.



**BUS 153 Human Resource Management**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns. (\*VLC)

**BUS 225 Business Finance**

2 2 3

Prerequisites: ACC 120

Corequisites: None

This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

**BUS 230 Small Business Management**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan. (\*VLC)

**BUS 240 Business Ethics**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

**BUS 253 Leadership and Mgt Skills**

3 0 3

Prerequisites: None

Corequisites: None

This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

**BUS 260 Business Communication**

3 0 3

Prerequisites: Take one: ENG 110 or ENG 111

Corequisites: None

This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place. (\*VLC)

**BUS 280 REAL Small Business**

4 0 4

Prerequisites: None

Corequisites: None

This course introduces hands-on techniques and procedures for planning and opening a small business, including the personal qualities needed for entrepreneurship. Emphasis is placed on market research, finance, time management, and day-to-day activities of owning/operating a small business. Upon completion, students should be able to write and implement a viable business plan and seek funding.

**Cyber Crime Technology****CCT 110 Intro to Cyber Crime**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces and explains the various types of offenses that qualify as cyber crime activity. Emphasis is placed on identifying cyber crime activity and the response to these problems from both the private and public domains. Upon completion, students should be able to accurately describe and define cyber crime activities and select an appropriate response to deal with the problem.

**CCT 112 Ethics and High Technology**

3 0 3

Prerequisites: None

Corequisites: None

This course covers ethical considerations and accepted standard practices applicable to technological investigations and computer privacy issues relative to the cyber crime investigator. Topics include illegal and unethical investigative activities, end-justifying-the-means issues, and privacy issues of massive personal database information gathered by governmental sources. Upon completion, students should be able to examine their own value systems and apply ethical considerations in identifiable cyber crime investigations.

**CCT 121 Computer Crime Invest.**

3 2 4

Prerequisites: None

Corequisites: None

This course introduces the fundamental principles of computer crime investigation processes. Topics include crime scene/incident processing, information gathering techniques, data retrieval, collection and preservation of evidence, preparation of reports and court presentations. Upon completion, students should be able to identify cyber crime activity and demonstrate proper investigative techniques to process the scene and assist in case prosecution.

**CCT 231 Technology Crimes and Law**

3 0 3

Prerequisites: None

Corequisites: None

This course covers the applicable technological laws dealing with the regulation of cyber security and criminal activity. Topics include an examination of state, federal and international laws regarding cyber crime with an emphasis on both general and North Carolina statutes. Upon completion, students should be able to identify the elements of cyber crime activity and discuss the trends of evolving laws.

**CCT 250 Network Vulnerabilities I**

2 2 3

Prerequisites: None

Corequisites: None

This course introduces students to penetration testing, network vulnerabilities, and hacking. Topics include an overview of traditional network security, system hardening, and known weaknesses. Upon completion, students should be able to evaluate weaknesses of traditional and wireless network for the purpose of incident response, reconstruction, and forensic investigation.

**CCT 251 Network Vulnerabilities II**

2 2 3

Prerequisites: CCT 250

Corequisites: None

This course advances students' knowledge of penetration testing, network vulnerabilities, and hacking. Topics include analyzing advanced techniques for circumventing network security hardware and software. Upon completion, students should be able to assemble test kits for multiple operating systems, scan and footprint networks, and perform advanced forensic investigation.

**CCT 289 Capstone Project**

1 6 3

Prerequisites: CCT 231 or CCT 220

Corequisites: None

This course provides experience in cyber crime investigations or technology security audits in either the public or private domain. Emphasis is placed on student involvement with businesses or agencies dealing with technology security issues or computer crime activities. Upon completion, students should be able to successfully analyze, retrieve erased evidence and testify in mock proceedings against these criminal entrepreneurs.

**Chemistry**

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.*

**CHM 131 Introduction to Chemistry**

3 0 3

Prerequisites: DMA 040

Corequisites: None

This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. (\*VLC)*

**CHM 131A Introduction to Chemistry Lab**

0 3 1

Prerequisites: DMA 040

Corequisites: CHM 131

This course is a laboratory to accompany CHM 131.

Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**CHM 132 Organic and Biochemistry**  
3 3 4

Prerequisites: CHM 131 and CHM 131A or CHM 151

Corequisites: None

This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics. (\*VLC)*

**CHM 151 General Chemistry I**  
3 3 4

Prerequisites: MAT 003

Corequisites: None

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**CHM 152 General Chemistry II**  
3 3 4

Prerequisites: CHM 151

Corequisites: None

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**CHM 251 Organic Chemistry I**  
3 3 4

Prerequisites: CHM 152

Corequisites: None

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

**CHM 252 Organic Chemistry II**  
3 3 4

Prerequisites: CHM 251

Corequisites: None

This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

**CHM 271 Biochemical Principles**  
3 0 3

Prerequisites: CHM 252

Corequisites: None

The course covers fundamental principles of biochemistry. Topics include structures, properties, reactions, and mechanisms of biomacromolecules including amino acids, peptides, proteins, carbohydrates and nucleic acids, enzymatic metabolic pathways, and biochemical genetics. Upon completion, students should be able to demonstrate an understanding of fundamental biochemical processes. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**CHM 271A Biochemical Prin Laboratory**  
0 3 1

Prerequisites: CHM 252

Corequisites: CHM 271

This course is a laboratory for CHM 271. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 271. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 271. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement.*

## Computer Information Systems

**CIS 070 Fundamentals of Computing**  
0 2 1

Prerequisites: None

Corequisites: None

This course covers fundamental functions and operations of the computer. Topics include identification of components, overview of operating systems, and other basic computer operations. Upon completion, students should be able to operate computers, access files, print documents and perform basic applications operations.

**CIS 110 Introduction to Computers**  
2 2 3

Prerequisites: None

Corequisites: None

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

**CIS 111 Basic PC Literacy**

1 2 2

Prerequisites: None

Corequisites: None

This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills. *This course is also available through the Virtual Learning Community (VLC).*

**CIS 115 Intro to Programming & Logic**  
2 3 3

Prerequisites: Take One Set:

Set 1: DMA-010, DMA-020, DMA-030, and DMA-040

Set 2: DMA-025 and DMA-040

Set 3: MAT-121

Set 4: MAT-171

Set 5: MAT-003

Set 6: BSP-4003

Corequisites: None

This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to use top-down algorithm design and implement algorithmic solutions in a programming language.

Competencies

1. Apply control structures

2. Apply top-down algorithmic design.

3. Implement algorithmic solutions in a programming language. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in Mathematics (Quantitative).*

## Criminal Justice

**CJC 110 Basic Law Enforcement BLET**  
10 30 20

Prerequisites: None

Corequisites: None

This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics include those mandated by North Carolina Administration Code as essential for functioning in law enforcement. Upon completion, the student should be able to demonstrate competence in the topics required for the state comprehensive certification examination. *This is a certificate-level course.*

**CJC 111 Introd. to Criminal Justice**  
3 0 3

Prerequisites: None

Corequisites: None

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. *This course has been approved for transfer under the ICAA as a pre-major and/or elective course requirement.*

**CJC 112 Criminology**  
3 0 3

Prerequisites: None

Corequisites: None

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime



Class/Lab/Credit or Class/Lab/Exp./Credit  
causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

**CJC 120 Interviews/Interrogations**  
1 2 2

Prerequisites: None  
Corequisites: None  
This course covers basic and special techniques employed in criminal justice interviews and interrogations. Emphasis is placed on the interview/interrogation process, including interpretation of verbal and physical behavior and legal perspectives. Upon completion, students should be able to conduct interviews/interrogations in a legal, efficient, and professional manner and obtain the truth from suspects, witnesses, and victims.

**CJC 121 Law Enforcement Operations**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, student should be able to explain theories, practices, and issues related to law enforcement operations. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

**CJC 122 Community Policing**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course covers the historical, philosophical, and practical dimensions of community policing. Emphasis is placed on the empowerment of police and the community to find solutions to problems by forming partnerships. Upon completion, students should be able to define community policing, describe how community policing strategies solve problems, and compare community policing to traditional policing.

**CJC 131 Criminal Law**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

**CJC 132 Court Procedure and Evidence**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper

Class/Lab/Credit or Class/Lab/Exp./Credit  
judicial procedures, and the admissibility of evidence.

**CJC 141 Corrections**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

**CJC 144 Crime Scene Processing**  
2 3 3

Prerequisites: None  
Corequisites: None  
This course introduces the theories and practices of crime scene processing and investigating. Topics include legal considerations at the crime scene, processing indoor and outdoor scenes, recording, note taking, collection and preservation of evidence and submission to the crime laboratory. Upon completion, the student should be able to evaluate and search various crime scenes and demonstrate the appropriate techniques.

**CJC 160 Terrorism: Underlying Issues**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course identifies the fundamental reasons why America is a target for terrorists, covering various domestic/international terrorist groups and ideologies from a historical aspect. Emphasis is placed upon recognition of terrorist crime scene; weapons of mass destruction; chemical, biological, and nuclear terrorism; and planning considerations involving threat assessments. Upon completion, students should be able to identify and discuss the methods used in terrorists' activities and complete a threat assessment for terrorists' incidents.

**CJC 161 Intro. to Homeland Security**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course introduces the historical, organizational and practical aspects of Homeland Security. Topics include a historic overview, definitions and concepts, organizational structure, communications, technology, mitigation, prevention and preparedness, response and recovery, and the future of Homeland Security. Upon completion, students should be able to explain essential characteristics of terrorism and Homeland Security, and define roles, functions and interdependency between agencies.

**CJC 212 Ethics and Comm. Relations**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and

Class/Lab/Credit or Class/Lab/Exp./Credit  
other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

**CJC 231 Constitutional Law**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

**CJC 232 Civil Liability**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course covers liability issues for the criminal justice professional. Topics include civil rights violations, tort liability, employment issues, and other related topics. Upon completion, students should be able to explain civil trial procedures and discuss contemporary liability issues.

## Communication

*For AA, AS, and AFA programs, 3 SHC in Speech/Communication may be substituted for 3 SHC in Humanities/ Fine Arts. Speech/Communication may not substitute for the literature requirement.*

**COM 110 Intro. to Communication**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition. This course has been approved for transfer under the CAA and ICAA as a Communications course for the following degrees: AS, AA, AAS.*

**COM 120 Intro. to Interpersonal Com.**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general educa-*

**COM 231 Public Speaking**  
 3 0 3

Prerequisites: None  
 Corequisites: None  
 This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## Cosmetology

**COS 111 Cosmetology Concepts I**  
 4 0 4

Prerequisites: None  
 Corequisites: COS 112  
 This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

**COS 112 Salon I**  
 0 24 8

Prerequisites: None  
 Corequisites: COS 111  
 This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

**COS 113 Cosmetology Concepts II**  
 4 0 4

Prerequisites: COS 111 and COS 112  
 Corequisites: none  
 This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

**COS 114 Salon II**  
 0 24 8

Prerequisites: COS 111 and COS 112  
 Corequisites: none  
 This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

**COS 115 Cosmetology Concepts III**  
 4 0 4

Prerequisites: COS 111 and COS 112  
 Corequisites: none  
 This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and

Class/Lab/Credit or Class/Lab/Exp./Credit  
 brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

**COS 116 Salon III**  
 0 12 4

Prerequisites: COS 111 and COS 112  
 Corequisites: none  
 This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

**COS 117 Cosmetology Concepts IV**  
 2 0 2

Prerequisites: COS 111 and COS 112  
 Corequisites: none  
 This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

**COS 118 Salon IV**  
 0 21 7

Prerequisites: COS 111 and COS 112  
 Corequisites: none  
 This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

**COS 119 Esthetics Concepts I**  
 2 0 2

Prerequisites: None  
 Corequisites: None  
 This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements.

**COS 120 Esthetics Salon I**  
 0 18 6

Prerequisites: None  
 Corequisites: None  
 This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

**COS 121 Manicure/Nail Technology I**  
 4 6 6

Prerequisites: None  
 Corequisites: None  
 This course covers techniques of nail technology, hand and arm surface manipulation, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, surface manipulation, and other related topics. Upon completion, students should be able to safely and

Class/Lab/Credit or Class/Lab/Exp./Credit  
 competently perform nail care, including manicures, pedicures, surface manipulations, decorating and artificial applications in a salon setting.

**COS 125 Esthetics Concepts II**  
 2 0 2

Prerequisites: None  
 Corequisites: None  
 This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, makeup, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.

**COS 126 Esthetics Salon II**  
 0 18 6

Prerequisites: None  
 Corequisites: None  
 This course provides experience in a simulated esthetics setting. Topics include machine facials, aromatherapy, surface manipulation in relation to skin care, electricity, and apparatus. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology licensing examination for Estheticians.

**COS 222 Manicure/Nail Technology II**  
 4 6 6

Prerequisites: COS 121  
 Corequisites: None  
 This course covers advanced techniques of nail technology and hand and arm surface manipulation. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations.

**COS 224 Trichology & Chemistry**  
 1 3 2

Prerequisites: None  
 Corequisites: None  
 This course is a study of hair and the interaction of applied chemicals. Emphasis is placed on pH actions and the reactions and effects of chemical ingredients. Upon completion, students should be able to demonstrate an understanding of chemical terminology, pH testing, and chemical reactions on hair.

**COS 240 Contemporary Design**  
 1 3 2

Prerequisites: COS 111 and COS 112  
 Corequisites: None  
 This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.

**COS 250 Computerized Salon Ops**  
 1 0 1

Prerequisites: None  
 Corequisites: None  
 This course introduces computer and salon software. Emphasis is placed on various computer and salon software applications. Upon completion, students should be able to utilize computer skills and software applications in the salon setting.

Class/Lab/Credit or Class/Lab/Exp./Credit  
**COS 251 Manicure Instructor Concepts**  
 8 0 8  
 Prerequisites: None  
 Corequisites: NC Cosmetology or Manicurist License and six months work experience in a cosmetic arts salon  
 This course introduces manicuring instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervision techniques, and assess student classroom performance.

**COS 252 Manicure Instructor Practicum**  
 0 15 5  
 Prerequisites: NC Cosmetology or Manicurist License and six months work experience in a cosmetic arts salon  
 Corequisites: COS 251  
 This course covers supervisory and instructional skills for teaching manicuring students in a laboratory setting. Topics include demonstrations of services, supervision, student assessment, and other related topics. Upon completion, students should be able to demonstrate competence in the areas covered by the Manicuring Instructor Licensing Examination and meet program completion requirements.

**COS 253 Esthetics Ins. Concepts I**  
 6 15 11  
 Prerequisites: None  
 Corequisites: None  
 This course introduces esthetic instructional concepts and skills. Topics include orientation, theories of education, unit planning, daily lesson plans, laboratory management, student assessment in a laboratory setting. Upon completion, students should be able to demonstrate esthetic services and instruct and objectively assess student performance in a classroom setting.

**COS 254 Esthetic Ins. Concepts II**  
 6 15 11  
 Prerequisites: None  
 Corequisites: None  
 This course covers advanced esthetic instructional concepts and skills. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools record keeping and other related topics. Upon completion, students should be able to demonstrate competencies in the areas covered by the Esthetics Instructor Licensing examination and meet program requirements.

**COS 271 Instructor Concepts I**  
 5 0 5  
 Prerequisites: Cosmetology License and six months experience as a licensed cosmetologist  
 Corequisites: COS 272  
 This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

**COS 272 Instructor Practicum I**  
 0 21 7  
 Prerequisites: Cosmetology License and six months experience as a licensed cosmetologist

Class/Lab/Credit or Class/Lab/Exp./Credit  
 Corequisites: COS 271  
 This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

**COS 273 Instructor Concepts II**  
 5 0 5  
 Prerequisites: COS 271 and COS 272  
 Corequisites: COS 274  
 This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

**COS 274 Instructor Practicum II**  
 0 21 7  
 Prerequisites: COS 271 and COS 272  
 Corequisites: COS 273  
 This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements. *This is a certificate-level course.*

## Computer Science

**CSC 134 C++ Programming**  
 2 3 3  
 Prerequisites: None  
 Corequisites: None  
 This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course is also available through the Virtual Learning Community (VLC).*

**CSC 151 JAVA Programming**  
 2 3 3  
 Prerequisites: None  
 Corequisites: None  
 This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course available through VLC.*

## Computer Technology Integration

**CTI 110 Web, PGM and Db Management**  
 2 2 3

Class/Lab/Credit or Class/Lab/Exp./Credit  
 Prerequisites: None  
 Corequisites: None  
 This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

**Competencies**  
 1. Apply basic principles of programming logic.  
 2. Create a simple website with mark-up tools.  
 3. Create a simple database table.

**CTI 120 Network & Security Foundations**  
 2 2 3  
 Prerequisites: None  
 Corequisites: None  
 This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

**Competencies**  
 1. Perform basic calculations necessary for network operations.  
 2. Identify the components of local and wide area networks.  
 3. Identify security risks to a networked information system.

**CTI 140 Virtualization Concepts**  
 1 4 3  
 Prerequisites: None  
 Corequisites: None  
 This course introduces operating system virtualization. Emphasis is placed on virtualization terminology, virtual machine storage, virtual networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of virtual machines.

## Computer Information Technology

**CTS 115 Info Sys Business Concept**  
 3 0 3  
 Prerequisites: None  
 Corequisites: None  
 The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems. *This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement.*

**CTS 120 Hardware/Software Support**  
 2 3 3  
 Prerequisites: None  
 Corequisites: None  
 This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component



identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

**CTS 130 Spreadsheet**  
2 2 3

Prerequisites: None  
Corequisites: None

This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

**CTS 135 Integrated Software Intro.**  
2 4 4

Prerequisites: None  
Corequisites: None

This course instructs students in the Windows or Linux based program suites for word processing, spreadsheet, database, personal information manager, and presentation software. This course prepares students for introductory level skills in database, spreadsheet, personal information manager, word processing, and presentation applications to utilize data sharing. Upon completion, students should be able to design and integrate data at an introductory level to produce documents using multiple technologies.

**CTS 285 Systems Analysis & Design**  
3 0 3

Prerequisites: CIS 115  
Corequisites: None

This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques.

**CTS 289 System Support Project**  
1 4 3

Prerequisites: CTS 285  
Corequisites: None

This course provides an opportunity to complete a significant support project with minimal instructor assistance. Emphasis is placed on written and oral communication skills, project definition, documentation, installation, testing, presentation, and user training. Upon completion, students should be able to complete a project from the definition phase through implementation.

## Database Management Technology

**DBA 110 Database Concepts**  
2 3 3

Prerequisites: CIS 110  
Corequisites: None

This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.

## Design Drafting

**DDF 110 Cabinet Design/Drafting**  
1 2 2

Prerequisites: DFT 117  
Corequisites: None

This course covers the production of shop drawings and equipment lists. Topics include the use of orthographic projections and axonometric, oblique, and perspective projections in production drawings. Upon completion, students should be able to design and produce a set of plans that will facilitate the economical production of a project.

## Design

**DES 135 Principles & Elements of Design I**  
2 4 4

Prerequisites: None  
Corequisites: None

This course introduces the basic concepts and terminology of design as they relate to the design profession. Topics include line, pattern, space, mass, shape, texture, color, unity, variety, rhythm, emphasis, balance, proportion, scale, and function. Upon completion, students should be able to demonstrate an understanding of the principles covered through hands-on application.

## Drafting

**DFT 119 Basic CAD**  
1 2 2

Prerequisites: None  
Corequisites: None

This course introduces computer-aided drafting software for specific technologies to non-drafting majors. Emphasis is placed on understanding the software command structure and drafting standards for specific technical fields. Upon completion, students should be able to create and plot basic drawings.

**DFT 170 Engineering Graphics**  
2 2 3

Prerequisites: None  
Corequisites: None

This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices.

## Drama/Theatre

**DRA 111 Theatre Appreciation**  
3 0 3

Prerequisites: None  
Corequisites: None

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**DRA 126 Storytelling**  
3 0 3

Prerequisites: None  
Corequisites: None

This course introduces the art of storytelling and the

oral traditions of folk literature. Topics include the history of storytelling, its value and purpose, techniques of the storyteller, and methods of collecting verbal art. Upon completion, students should be able to present and discuss critically stories from the world's repertory of traditional lore. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## Economics

**ECO 251 Principles of Microeconomics**  
3 0 3

Prerequisites: None  
Corequisites: None

This course introduces economic analysis of individual, business, and industry choices in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**ECO 252 Principles of Macroeconomics**  
3 0 3

Prerequisites: None  
Corequisites: None

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## Education

**EDU 119 Intro to Early Child Education**  
4 0 4

Prerequisites: None  
Corequisites: None

This course covers the foundations of the education profession, the diverse educational settings for young children, professionalism and planning developmentally appropriate programs for children. Topics include historical foundations, program types, career options, professionalism, and creating inclusive environments and curriculum that are responsive to the needs of children and families. Upon completion, students should be able design career plans and develop appropriate schedules, environments and activity plans for children. (\*VLC)

**EDU 131 Child, Family, & Commun**  
3 0 3

Prerequisites: None  
Corequisites: None

This course covers the development of partnerships among culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing and supporting respectful relationships between diverse families, programs/schools, and com-

Class/Lab/Credit or Class/Lab/Exp./Credit  
 munity agencies/resources reflective of the NAEYC Code of Ethical Conduct and the Code of Ethics for North Carolina Educators. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children birth through adolescence, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child.

#### EDU 144 Child Development I

3 0 3

Prerequisites: None

Corequisites: None

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

#### EDU 145 Child Development II

3 0 3

Prerequisites: None

Corequisites: None

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

#### EDU 146 Child Guidance

3 0 3

Prerequisites: None

Corequisites: None

This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

#### EDU 151 Creative Activities

3 0 3

Class/Lab/Credit or Class/Lab/Exp./Credit

Prerequisites: None

Corequisites: None

This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development. Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

#### EDU 153 Health, Safety, & Nutrition

3 0 3

Prerequisites: None

Corequisites: None

This course covers promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, safe learning environments, and adhere to state regulations. *This course is also available through the Virtual Learning Community (VLC).*

#### EDU 161 Intro to Exceptional Children

3 0 3

Prerequisites: None

Corequisites: None

This course covers children with exceptionalities as life long learners within the context of the community, school and family. Emphasis is placed on inclusion, legal, social/political, environmental, and cultural issues relating to the teaching of children with exceptionalities. Upon completion, students should be able to demonstrate knowledge of identification processes, inclusive techniques, and professional practices and attitudes.

#### EDU 163 Classroom Mgmt and Instruction

3 0 3

Prerequisites: None

Corequisites: None

This course examines classroom management and evidence-based instructional strategies that create supportive learning environments to provide developmentally appropriate guidance for school-age populations. Topics include classroom management and organization, teaching strategies, individual student differences and learning styles, ongoing systematic observation, and developmentally appropriate classroom guidance techniques. Upon completion, students should be able to utilize developmentally appropriate behavior management and high quality instructional strategies that enhance the teaching/learning process and promote students' academic success.

#### EDU 175 Intro to Trade & Industri

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the philosophy, scope, and objectives of industrial education. Topics include the development of industrial education, employment opportunities, current events, current practices, and

Class/Lab/Credit or Class/Lab/Exp./Credit

emerging trends. Upon completion, students should be able to describe the history, identify current practices, and describe current trends in industrial education.

#### EDU 177 Instructional Methods

2 2 3

Prerequisites: None

Corequisites: None

This course covers instructional methods in technical education with emphasis on competency-based instruction. Topics include writing objectives, industrial methods, and determining learning styles. Upon completion, students should be able to select and demonstrate the use of a variety of instructional methods.

#### EDU 179 Vocational Student Organizations

3 0 3

Prerequisites: None

Corequisites: None

This course covers planning and organizing vocational youth clubs by understanding the structure and operating procedures to use club activities for personal and professional growth. Topics include self-assessment to set goals, club structure, election and installation of officers, club activities, function of committees, running meetings, contest preparation, and leadership skills. Upon completion students should be able to set personal goals, outline club structure, elect and install officers.

#### EDU 184 Early Childhood Intro Prac

1 3 2

Prerequisites: EDU 119

Corequisites: None

This course introduces students to early childhood settings and applying skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting in the implementation of developmentally appropriate activities/environments for all children; and modeling reflective/professional practices. Upon completion, students should be able to demonstrate developmentally appropriate interactions with children and ethical/professional behaviors as indicated by assignments and onsite faculty visits.

#### EDU 216 Foundations of Education

4 0 4

Prerequisites: None

Corequisites: None

This course introduces the American educational system and the teaching profession. Topics include the historical and philosophical influences on education, various perspectives on educational issues, and experiences in K-12 classrooms. Upon completion, students should be able to reflect on classroom observations, analyze the different educational approaches, including classical/traditional and progressive, and have knowledge of the various roles of educational systems at the federal, state and local level. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

#### EDU 221 Children With Exceptionalities

3 0 3

Prerequisites: Take one set:  
Set 1: EDU-144, EDU-145  
Set 2: PSY-244 PSY-245

Corequisites: None

This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction,

adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**EDU 222 Learners W/ Behavior Disorders**

3 0 3

Prerequisites: Take one set:  
Set 1: EDU-144 and EDU-145  
Set 2: PSY-244 and PSY-245

Corequisites: None

This course provides a comprehensive study of learners with behavioral disorders encompassing characteristics, assessments, placement alternatives, inclusive environments and family interventions. Topics include etiology of behavior disorders, appropriate intervention strategies, early intervention/special education referral processes, family and community partnerships, inclusive environments, and legislative mandates. Upon completion, students should be able to identify characteristics of behavior for which additional supports are needed, describe the referral processes, identify community resources, and the importance of collaboration with families/professionals, and recognize appropriate intervention strategies in inclusive environments.

**EDU 223 Specific Learning Disab**  
(EDU 223 replaced EDU 148)

3 0 3

Prerequisites: Take one set  
Set 1: EDU 144, EDU 145  
Set 2: PSY 244, PSY 245

Corequisites: None

This course provides a comprehensive study of characteristics, alternative assessments, teaching strategies, placement options, inclusion, and family intervention for children with specific learning disabilities. Topics include causes, assessment instruments, learning strategies, and collaborative/inclusion methods for children with specific learning disabilities. Upon completion, students should be able to assist in identifying, assessing, and providing educational interventions for children with specific learning disabilities and their families.

**EDU 187 Teaching and Learning for All**

3 3 4

Prerequisites: None  
Corequisites: None

This course introduces students to knowledge, concepts, and best practices needed to provide developmentally appropriate, effective, inclusive, and culturally responsive educational experiences in the classroom. Topics include growth and development, learning theory, student motivation, teaching diverse learners, classroom management, inclusive environments, student-centered practices, instructional strategies, teaching methodologies, observation/assessment techniques, educational planning, reflective practice, collaboration, cultural competence, ethics, professionalism, and leadership. Upon completion, students should be able to identify the knowledge,

skills, roles, and responsibilities of an effective educator as defined by state and national professional teaching standards.

**EDU 234 Infants, Toddlers, and Twos**

3 0 3

Prerequisites: Take EDU-119

Corequisites: None

This course covers the development of high-quality, individualized, responsive/engaging relationships and experiences for infants, toddlers, and twos. Emphasis is placed on typical and atypical child development, working with diverse families to provide positive, supportive, and engaging early learning activities and interactions through field experiences and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate responsive curriculum planning, respectful relationships and exposure to a variety of developmentally appropriate experiences/materials that support a foundation for healthy development and growth of culturally, linguistically and ability diverse children birth to 36 months.

**EDU 235 School-Age Develop & Programs**

3 0 3

Prerequisites: None

Corequisites: None

This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques and program development. Upon completion, students should be able to discuss developmental principles for culturally, linguistically, and ability diverse children ages five to twelve and plan and implement developmentally appropriate programs and activities.

**EDU 243 Learning Theory**

3 0 3

Prerequisites: None

Corequisites: None

This course provides lateral entry teachers an introduction to learning theory, various styles of learning, and motivational factors involved in the learning process. Emphasis is placed on the development of cognitive skills using the eight types of intelligence and applying these to practical classroom situations. Upon completion, students should be able to describe theories and styles of learning and discuss the relationship between different types of intelligence to learning motivation.

**EDU 247 Sensory & Physical Disab**

3 0 3

Prerequisites: Take one set

Set 1: EDU 144, EDU 145

Set 2: PSY 244, PSY 245

Corequisites: None

This course covers characteristics, intervention strategies, assistive technologies, and inclusive practices for children with sensory and physical disabilities. Topics include inclusive placement options, utilization of support services, other health impairments and family involvement for children with sensory and physical disabilities. Upon completion, students should be able to identify and utilize intervention strategies and service delivery options for those specific disabilities.

**EDU 248 Developmental Delays**

3 0 3

Prerequisites: Take one set

Set 1: EDU 144, EDU 145

Set 2: PSY 244, PSY 245

Corequisites: None

This course covers the causes and assessment of devel-

opmental delays and individualized instruction and curriculum for children with developmental delays. Emphasis is placed on definition, characteristics, assessment, educational strategies, inclusion, family involvement, and services for children with developmental delays. Upon completion, students should be able to identify, assess, and plan educational intervention strategies for children with developmental delays and their families.

**EDU 250 Teacher Licensure Preparation**

3 0 3

Prerequisites: None

Corequisites: Take one set:

Set 1: ENG-111 and MAT-143

Set 2: ENG-111 and MAT-152

Set 3: ENG-111 and MAT-171

This course provides information and strategies necessary for transfer to a teacher licensure program at a senior institution. Topics include entry level teacher licensure exam preparation, performance based assessment systems, requirements for entry into teacher education programs, the process to become a licensed teacher in North Carolina, and professionalism including expectations within the field of education. Upon completion, students should be able to utilize educational terminology and demonstrate knowledge of teacher licensure processes including exam preparation, technology based portfolio assessment, and secondary admissions processes to the school of education at a senior institution.

**EDU 252 Math & Sci Activities**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces discovery experiences in math and science. Topics include concepts, facts, phenomena, and skills in each area. Upon completion, students should be able to identify, plan, select materials and equipment, and implement and evaluate developmentally appropriate curriculum materials.

**EDU 261 Early Childhood Admin I**

3 0 3

Prerequisites: None

Corequisites: Take EDU-119

This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.

**EDU 262 Early Childhood Admin II**

3 0 3

Prerequisites: Take All: EDU-119 and EDU-261

Corequisites: None

This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early



Class/Lab/Credit or Class/Lab/Exp./Credit  
 childhood programs, develop strategies for advocacy and integrate community into programs.

**EDU 271 Educational Technology**  
 2 2 3

Prerequisites: None  
 Corequisites: None

This course introduces the ethical use of technology to enhance teaching and learning in all educational settings. Emphasis is placed on technology concepts, ethical issues, digital citizenship, instructional strategies, assistive technology, and the use of technology for professional development and communication. Upon completion, students should be able to discuss technology concepts, ethically use a variety of technology resources, demonstrate appropriate technology skills in educational environments, and identify assistive technology.

**EDU 275 Effective Teach Train**  
 2 0 2

Prerequisites: None  
 Corequisites: None

This course provides specialized training using an experienced-based approach to learning. Topics include instructional preparation and presentation, student interaction, time management, learning expectations, evaluation, and curriculum principles and planning. Upon completion, students should be able to prepare and present a six-step lesson plan and demonstrate ways to improve students' time-on-task.

**EDU 279 Literacy Develop and Instruct**  
 3 3 4

Prerequisites: None  
 Corequisites: None

This course is designed to provide students with concepts and skills of literacy development, instructional methods/materials and assessment techniques needed to provide scientifically-based, systematic reading and writing instruction into educational practice. Topics include literacy concepts, reading and writing development, developmentally appropriate pedagogy, culturally-responsive instruction, standards-based outcomes, lesson planning, formative/summative assessment, recognizing reading difficulties, research-based interventions, authentic learning experiences, classroom implementation, and reflective practice. Upon completion, students should be able to plan, implement, assess, evaluate, and demonstrate developmentally appropriate literacy instruction aligned to the NC Standard Course of Study and other state and national standards.

**EDU 280 Language/Literacy Experiences**  
 3 0 3

Prerequisites: None  
 Corequisites: None

This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse.

**EDU 281 Instruct. Strat./Read & Writ**  
 2 2 3

Prerequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

Corequisites: None

This course covers concepts, resources, and methods for teaching reading and writing to elementary through middle-grade children. Topics include the importance of literacy, learning styles, skills assessment, various reading and writing approaches and instructional strategies. Upon completion, students should be able to assess, plan, implement and evaluate school-age literacy experiences as related to the North Carolina Standard Course of Study.

**EDU 284 Early Child Capstone Prac**  
 1 9 4

Prerequisites: Take One Set:

Set 1: EDU-119, EDU-144, EDU-145, EDU-146, and EDU-151

Set 2: EDU-119, PSY-244, PSY-245, EDU-146, and EDU-151

Set 3: EDU-119, PSY-245, EDU-144, EDU-146, and EDU-151

Set 4: EDU-119, PSY-244, EDU-145, EDU-146, and EDU-151

Corequisites: None

This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments.

**EDU 285 Internship Exp-School Age**  
 1 9 4

Prerequisites: Take One Set:

Set 1: EDU 144, EDU 145, EDU 118, EDU 163

Set 2: PSY 244, PSY 245, EDU 118, EDU 163

Set 3: PSY 244, EDU 145, EDU 118, EDU 163

Set 4: EDU 144, PSY 245, EDU 118, EDU 163

Set 5: PSY 244, PSY 245, EDU 216, EDU 163

Set 6: EDU 144, EDU 145, EDU 216, EDU 163

Set 7: EDU 144, PSY 245, EDU 216, EDU 163

Set 8: PSY 244, EDU 145, EDU 216, EDU 163

Corequisites: None

College Transfer N/A

This course is designed to allow students to demonstrate acquired skills in a quality public or private school environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to demonstrate developmentally appropriate lesson plans/assessments, appropriate guidance techniques, ethical/professional behaviors including the use of appropriate technology, as indicated by assignments and onsite faculty visits.

**EDU 289 Adv Issues/School Age**  
 0 2 1

Prerequisites: None

Corequisites: None

This course covers advanced topics and issues that relate to school-age programs. Emphasis is placed on current advocacy issues, emerging technology, professional growth, ethics, and organizations for providers/teachers working with school-age populations. Upon completion, students should be able to list, discuss,

Class/Lab/Credit or Class/Lab/Exp./Credit

and explain advanced current topics and issues surrounding school-aged populations.

## Electricity

**ELC 111 Intro to Electricity**  
 2 2 3

Prerequisites: None

Corequisites: None

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronics majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

**ELC 112 DC/AC Electricity**  
 3 6 5

Prerequisite: None

Corequisites: None

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

Competencies

- 1. Demonstrate safe practices and procedures with tools, materials, and industry accepted test equipment covered in the course.
- 2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to electrical circuits.
- 3. Construct and analyze series, parallel and combinations circuits using appropriate components.
- 4. Use appropriate laws and formulas to perform circuit calculations.
- 5. Interpret electrical schematics.
- 6. Describe the characteristics of various power sources.

**ELC 113 Residential Wiring**  
 2 6 4

Prerequisite: None

Corequisites: None

This course introduces the care/usage of tools and materials used in residential electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical print reading; planning, layout; and installation of electrical distribution equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with residential electrical installations.

Competencies

•Student Learning Outcomes

- 1. Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.
- 2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to residential electrical circuits.
- 3. Draw, plan and interpret electrical plans and symbols used in residential applications
- 4. Identify, size, and install wiring and electrical

distribution equipment and devices associated with residential electrical installations in accordance with the National Electrical Code.

- 5. Recognize and demonstrate appropriate use of tools and materials that are used in residential wiring.

### ELC 115 Industrial Wiring

2 6 4

Prerequisites: None

Corequisites: None

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

#### Competencies

#### Student Learning Outcomes

1. Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.
2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to industrial electrical circuits.
3. Draw, plan, and interpret electrical plans and symbols used in industrial applications.
4. Identify, size, and install wiring and electrical distribution equipment and devices associated with industrial electrical installations in accordance with the National Electrical Code.
5. Recognize and demonstrate appropriate use of tools and materials that are used in industrial wiring.

### ELC 118 National Electrical Code

1 2 2

Prerequisites: None

Corequisites: : None

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

### ELC 119 NEC Calculations

1 2 2

Prerequisites: None

Corequisites: : None

This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

### ELC 128 Intro to PLC

2 3 3

Prerequisite: None

Corequisites: None

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs.

#### Competencies

#### •Student Learning Outcomes

- 1. Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.
- 2. List and describe the hardware components used in PLC systems.

- 3. Utilize numbering systems as applied to PLCs.

- 4. Demonstrate and describe the use of various PLC instruction sets.

- 5. Create various simple PLC programs using the appropriate instruction set.

- 6. Apply appropriate troubleshooting methods to PLCs.

### ELC 130 Advanced Motors/Controls

2 3 3

Prerequisite: Take One: ELC-111, ELC-112, ELC-131, or ELC-138

Corequisites: None

This course introduces the programmable logic control. This course covers motors concepts, construction and characteristics and provides a foundation in motor controls. Topics include motor control ladder logic, starters, timers, overload protection, braking, reduced voltage starting, SCR control, AC/DC drives, system and component level troubleshooting. Upon completion, students should be able to specify, connect, control, troubleshoot, and maintain motors and motor control systems.

### ELC 131 Circuit Analysis

3 3 4

Prerequisite: None

Corequisites: None

This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment.

#### Competencies

#### Student Learning Outcomes

- 1. Identify and describe the operation of components used in DC/AC circuits.
- 2. Apply math formulas and circuit theorems in the analyses of DC/AC Circuits.
- 3. Locate and select DC/AC devices using component specifications based on circuit requirements.
- 4. Construct series, parallel and combination circuits.
- 5. Select and demonstrate the use of appropriate test equipment to analyze circuit operation.
- 6. Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
- 7. Identify and demonstrate safe workplace practices.

### ELC 131A Circuit Analysis I Lab

0 3 1

Prerequisite: None

Corequisites: None

This course provides laboratory assignments as applied to fundamental principles of DC/AC electricity. Emphasis is placed on measurements and evaluation of electrical components, devices and circuits. Upon completion, the students will gain hands-on experience by measuring voltage, current, and opposition to current flow utilizing various meters and test equipment.

### ELC 213 Instrumentation

3 2 4

Prerequisites: None

Corequisites: ELC 131

This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric,

electronic, and other instruments. Upon completion, students should be able to install, maintain, and calibrate instrumentation.

## Electronics

### ELN 131 Analog Electronics

3 3 4

Prerequisites: None

Corequisites: None

This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.

#### Competencies

#### Student Learning Outcomes

1. Identify and describe operation of semiconductor devices.
2. Analyze where and how analog components are used.
3. Locate and select analog devices using component specifications based on circuit requirements.
4. Construct operational circuits using analog devices.
5. Select and demonstrate the use of appropriate test equipment to analyze circuit operation.
6. Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
7. Identify and demonstrate safe workplace practices.

### ELN 133 Digital Electronics

3 3 4

Prerequisite: None

Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and large scale integration (LSI) circuits, analog to digital (AD) and digital to analog (DA) conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

#### Competencies

#### •Student Learning Outcomes

- 1. Identify and describe the operation of digital electronic devices and circuits.
- 2. Analyze where and how digital electronics circuits are used.
- 3. Locate and select digital electronic devices using component specifications based on circuit requirements.
- 4. Construct operational circuits using digital devices.
- 5. Select and demonstrate the use of appropriate test equipment to analyze circuit operation.
- 6. Using appropriate troubleshooting techniques evaluate circuit performance applying suitable repair methods.
- 7. Identify and demonstrate safe workplace practices.

### ELN 135 Electronic Circuits

2 3 3

Prerequisites: None

Corequisites: None

This course covers discrete component amplifiers, power supplies, wave-shaping, oscillators, and special purpose ICs. Topics include feedback, analog arithmetic circuits, current and voltage sources,



amplifiers, timers, filters, regulators, and other related circuits. Upon completion, students should be able to determine, by the configuration, the function of common analog circuits and troubleshoot circuits based on applications.

### ELN 140 Semiconductor Devices

4 6 6

Prerequisites: None

Corequisites: None

This course covers semiconductor devices and circuits as they apply to the area of electronic servicing. Topics include semiconductor theory, diodes, transistors, linear integrated circuits, biasing, amplifiers, power supplies, and other related topics. Upon completion, students should be able to construct, verify, analyze, and troubleshoot semiconductor circuits.

### ELN 141 Digital Fundamentals

4 6 6

Prerequisites: None

Corequisites: None

This course covers combinational and sequential logic circuits. Topics include number systems, logic elements, Boolean algebra, Demorgan's theorem, logic families, flip flops, registers, counters, and other related topics. Upon completion, students should be able to analyze, verify, and troubleshoot digital circuits.

### ELN 231 Industrial Controls

2 3 3

Prerequisites: None

Corequisites: None

This course introduces the fundamental concepts of control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret schematics and demonstrate an understanding of electromechanical and electronic control of rotating machinery.

### ELN 233 Microprocessor Systems

3 3 4

Prerequisites: None

Corequisites: None

This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment.

### ELN 247 Electronic App Project

1 3 2

Prerequisites: None

Corequisites: None

This course provides a structured approach to an application-oriented electronics project. Emphasis is placed on selecting, planning, implementing, testing, and presenting an application-oriented project. Upon completion, students should be able to present and demonstrate an electronics application-oriented project.

### ELN 275 Troubleshooting

1 3 2

Prerequisites: None

Corequisites: None

This course covers techniques of analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and

specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to logically diagnose and isolate faults and perform necessary repairs to meet manufacturers' specifications.

## Emergency Medical Services

### EMS 110 EMT

6 6 3 9

Prerequisites: None

Corequisites: None

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

### EMS 122 EMS Clinical Practicum I

0 0 3 1

Prerequisites: Take EMS 110

Corequisites: None

This course provides the introductory hospital clinical experience for the paramedic student. Emphasis is placed on mastering fundamental paramedic skills. Upon completion, students should be able to demonstrate competency with fundamental paramedic level skills.

### EMS 130 Pharmacology

3 3 0 4

Prerequisites: Take EMS 110

Corequisites: None

This course introduces the fundamental principles of pharmacology and medication administration and is required for paramedic certification. Topics include medical terminology, pharmacological concepts, weights, measures, drug calculations, vascular access for fluids and medication administration and legislation. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

### EMS 131 Advanced Airway Management

1 2 0 2

Prerequisites: Take EMS 110

Corequisites: None

This course is designed to provide advanced airway management techniques and is required for paramedic certification. Topics must meet current guidelines for advanced airway management in the pre-hospital setting. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

### EMS 140 Rescue Scene Management

1 3 0 2

Prerequisites: None

Corequisites: None

This course introduces rescue scene management. Topics include response to hazardous material conditions, incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment.

### EMS 160 Cardiology I

2 3 0 3

Prerequisites: Take EMS 110

Corequisites: None

This course introduces the study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, electrophysiology, and rhythm interpretation. Upon completion, students should be able to recognize and interpret rhythms.

### EMS 220 Cardiology II

2 3 0 3

Prerequisites: Take All: EMS-122, EMS-130, and EMS-160

Corequisites: None

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include assessment and treatment of cardiac emergencies, cardiac pharmacology, and patient care. Upon completion, students should be able to manage the cardiac patient.

### EMS 221 EMS Clinical Practicum II

0 0 6 2

Prerequisites: Take One: EMS-121 or EMS-122

Corequisites: None

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on increasing the proficiency of students' skills and abilities in patient assessments and the delivery of care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

### EMS 231 EMS Clinical Practicum III

0 0 9 3

Prerequisites: Take EMS-221

Corequisites: None

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on enhancing the students' skills and abilities in providing advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

### EMS 235 EMS Management

2 0 0 2

Prerequisites: None

Corequisites: None

This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon completion, students should be able to understand the principles of managing emergency medical service delivery systems.

### EMS 240 Patients With Special Challenges

1 2 0 2

Prerequisites: Take All: EMS-122 and EMS-130

Corequisites: None

This course includes concepts of crisis intervention and techniques of interacting with patients with special challenges and is required for paramedic certification. Topics include appropriate intervention and interaction for neglected, abused, terminally ill, chronically ill, technology assisted, bariatric, physically challenged, mentally challenged, or assaulted patients as well as behavioral emergencies. Upon completion, students

should be able to recognize and manage the care of patients with special challenges.

**EMS 241 EMS Clinical Practicum IV**

0 0 12 4

Prerequisites: Take EMS-231

Corequisites: None

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on mastering the skills/competencies required of the paramedic providing advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

**EMS 250 Medical Emergencies**

3 3 0 4

Prerequisites: Take All: EMS-122 and EMS-130

Corequisites: None

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include appropriate interventions/treatments for disorders/diseases/injuries affecting the following systems: respiratory, neurological, abdominal/gastrointestinal, endocrine, genitourinary, musculoskeletal, and immunological as well as toxicology, infectious diseases and diseases of the eyes, ears, nose and throat. Upon completion, students should be able to recognize, assess and manage the care of frequently encountered medical conditions based upon initial patient assessment.

**EMS 260 Trauma Emergencies**

1 3 0 2

Prerequisites: Take All: EMS-122 and EMS-130

Corequisites: None

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include an overview of thoracic, abdominal, genitourinary, orthopedic, neurological, and multi-system trauma, soft tissue trauma of the head, neck, and face as well as environmental emergencies. Upon completion, students should be able to recognize and manage trauma situations based upon patient assessment and should adhere to standards of care.

**EMS 270 Lifespan Emergencies**

3 3 0 4

Prerequisites: Take All: EMS-122 and EMS-130

Corequisites: None

This course covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death required for paramedic certification. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies.

**EMS 285 EMS Capstone**

1 3 0 2

Prerequisites: Take All: EMS-220, EMS-250, and EMS-260

Corequisites: None

This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately

respond to a variety of EMS-related events.

**Engineering****EGR 125 Appl Software for Tech**

1 2 2

Prerequisite: None

Corequisites: None

This course introduces personal computer software and teaches students how to customize the software for technical applications. Emphasis is placed on the use of common office applications software programs such as spreadsheets, word processing, graphics, and internet access. Upon completion, students should be able to demonstrate competency in using applications software to solve technical problems and communicate the results in text and graphical formats.

**EGR 150 Intro. to Engineering**

1 2 2

Prerequisite: None

Corequisites: None

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

**EGR 220 Engineering Statistics**

3 0 3

Prerequisite: PHY 251

Corequisites: MAT 272

This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

**English**

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college's placement test.*

**ENG 001 English Skills Support**

0 2 1

Prerequisites: None

Corequisites: None

This course is designed to supplement the skills introduced in ENG-111 with emphasis placed on the editing and revision components of the writing process. Topics include concepts, skills, writing in a variety of genres and formats using a recursive process, and effective use of rhetorical strategies, with emphasis placed on the editing and revision components of the writing process. Upon completion, students should be able to produce unified, coherent, well-developed

essays using standard written English.

**ENG 002 Transition English**

0 6 3

Prerequisites: None

Corequisites: None

This course provides an opportunity to customize foundational English content in specific areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in college-level English. Upon completion, students should be able to build a stronger foundation for success in their gateway level English courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

**ENG 002 Writing and Inquiry Support**

1 2 2

Prerequisites: None

Corequisites: None

This course is designed to support students in the development of skills necessary for success in ENG 111 by complementing, supporting, and reinforcing ENG 111 Student Learning Outcomes. Emphasis is placed on developing a growth mindset, expanding skills for use in active reading and writing processes, recognizing organizational relationships within texts from a variety of genres and formats, and employing appropriate technology when reading and composing texts. Upon completion, students should be able to apply active reading strategies to college-level texts and produce unified, well-developed writing using standard written English.

**ENG 101 Applied Communications I**

3 0 3

Prerequisites: None

Corequisites: None

This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace. *This is a diploma-level course.*

**ENG 111 Writing and Inquiry**

3 0 3

Prerequisites: Take one set:

Set 1: DRE-097

Set 2: ENG-002

Set 3: BSP-4002

Corequisites: English 011

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in English composition.*

**Competencies****Student Learning Outcomes**

1. Demonstrate writing as a recursive process.
2. Demonstrate writing and inquiry in context using different rhetorical strategies to reflect, analyze, explain, and persuade in a variety of genres and formats.
3. Students will reflect upon and explain their writ-

ing strategies.

4. Demonstrate the critical use and examination of printed, digital, and visual materials.
5. Locate, evaluate, and incorporate relevant sources with proper documentation.
6. Compose texts incorporating rhetorically effective and conventional use of language.
7. Collaborate actively in a writing community.

### ENG 112 Writing/Research in the Disciplines

3 0 3

Prerequisites: ENG 111

Corequisites: None

This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines. *This course has been approved for transfer under the CAA as a general education course in English Composition. This course has been approved for transfer under the ICAA as a general education course in English Composition.*

### ENG 125 Creative Writing

3 0 3

Prerequisites: ENG 111

Corequisites: None

This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

### ENG 231 American Literature I

3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. (\*VLC)*

Competencies

Student Learning Outcomes

1. Describe, analyze, interpret and evaluate features of literary texts in several genres, applying appropriate literary and cultural terms.
2. Critically analyze and interpret American literature from its beginnings to 1865 within historical and cultural contexts.
3. Write critical essays about American literature that integrate primary and secondary sources using MLA documentation and standard academic written conventions.

### ENG 232 American Literature II

3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and

drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. (\*VLC)*

Competencies

1. Describe, analyze, interpret, and evaluate features of literary texts in several genres, applying appropriate literary and cultural terms.
2. Critically analyze and interpret American literature from 1865 to the present within historical and cultural contexts.
3. Write critical essays about American literature that integrate primary and secondary sources using MLA documentation and standard academic written conventions.

### ENG 241 British Literature I

3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. (\*VLC)*

### ENG 242 British Literature II

3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. (\*VLC)*

### ENG 272 Southern Literature

3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

### ENG 273 African-American Literature

3 0 3

Prerequisites: ENG 112, ENG 113, or ENG 114

Corequisites: None

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts. *This course has been approved to satisfy the*

*Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. (\*VLC)*

## Emergency Preparedness

### EPT 120 Sociology of Disaster

3 0 3

Prerequisites: None

Corequisites: None

This course is designed to overview sociological disaster research, disaster systems, and alternative research approaches. Topics include human and organizational behaviors, long disaster impact on communities, disaster warning, and evacuation considerations. Upon completion, students should be able to assess and predict the impact of disaster-related human behavior.

### EPT 124 EM Services Law and Ethics

3 0 3

Prerequisites: None

Corequisites: None

This course covers federal and state laws that affect emergency service personnel in the event of a natural disaster or terrorist incident. Topics include initial response and long-term management strategies, with an emphasis on legal and ethical considerations and coordination between local, state, and federal agencies. Upon completion, students should have an understanding of the role of private industry, government agencies, public policies, and federal/state declarations of disasters in emergency situations.

### EPT 130 Mitigation & Preparedness

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the mitigation and preparation techniques and methods necessary to minimize the impact of natural, technological, and man-made disaster. Topics include hazard identification and mapping, design and construction applications, financial incentives, insurance, structural controls, preparation, planning, assessment, implementation, and exercises. Upon completion, students should be able to develop a mitigation and preparedness plan.

### EPT 140 Emergency Management

3 0 3

Prerequisites: None

Corequisites: None

This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

### EPT 150 Incident Management

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the National Incident Management System (NIMS). Topics include integrating command and control systems, maintaining communication within command and control systems, and using NIMS procedures. Upon completion, students should be able to demonstrate knowledge of key concepts necessary for operating



**EPT 210 Response and Recovery**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course introduces the basic concepts, operational procedures, and authorities involved in response and recovery efforts to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster, response, and recovery work, with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster response plan and assess the needs of those involved in a major disaster.

**EPT 220 Terrorism and Emergency Mgt.**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course covers preparing for, responding to, and safely mitigating terrorism incidents. Topics include the history of terrorism, scene hazards, evidence preservation, risk assessment, roles and responsibilities, explosive recognition, and terrorism planning. Upon completion, student should be able to recognize the threat of terrorism and operate within the emergency management framework at a terrorism incident.

**EPT 275 Emergency Ops Center Mgt.**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course provides students with the knowledge and skills to effectively manage and operate an emergency operations center (EOC) during crisis situations. Topics include properly locating and designing and EOC, staffing, training and briefing EOC personnel, and how to operate an EOC. Upon completion, students should be able to demonstrate how to set up and operate an effective emergency operations center.

## Fire Protection

**FIP 110 Fire Prot./Rest. & Hotels**  
1 0 1  
Prerequisites: None  
Corequisites: None  
This course provides a general overview of fire protection terms and devices and their use as found in hotels, motels, and restaurants. Topics include understanding ventilation hood systems, alarms, in-house fire brigades, and other related topics. Upon completion, students should be able to operate a fire extinguisher and demonstrate knowledge of fire alarm systems, emergency features, and fire service terminology.  
Competencies  
• Student Learning Outcomes  
1. Provide an overview of fire protection terms and devices.  
2. Operate a fire extinguisher properly.  
3. Demonstrate knowledge of fire alarms and their maintenance.  
4. Describe the importance of alarms in commercial structures.

**FIP 120 Intro. to Fire Protection**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course provides an overview of the development, methods, systems and regulations that apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and related subjects. Upon completion,

Class/Lab/Credit or Class/Lab/Exp./Credit  
students should be able to demonstrate a broad understanding of the fire protection field.  
Competencies  
• Student Learning Outcomes  
1. Illustrate and explain the history and culture of the fire service.  
2. Discuss and describe the scope, purpose, and organizational structure of fire and emergency services.  
3. Identify protection and emergency-service careers in both the public and private sector.  
4. Describe the importance of wellness and fitness as it related to emergency services.  
5. Identify the primary responsibilities of fire prevention personnel including: code enforcement, public information, and public and private fire protection systems.

**FIP 124 Fire Protection and Public Ed.**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course introduces fire prevention concepts as they relate to community and industrial operations referenced in NFPA standard 101. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.  
Competencies  
• Student Learning Outcomes  
1. Describe the relationship of fire prevention as it relates to the community.  
2. Demonstrate an educational program for delivery to a defined audience.  
3. Demonstrate the ability to gather research about fire deaths in the United States and knowledge of how fire prevention impacts this data.  
4. Describe inspection practices and procedures.  
5. Define the laws, rules, regulations, and codes and identify those relevant to fire prevention of the authority having jurisdictions.

**FIP 132 Building Construction**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course covers the principles and practices referenced in NFPA standard 220 related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.  
Competencies  
• Student Learning Outcomes  
1. Describe building construction as it relates to fire fighter safety, building codes, fire prevention, code enforcement, firefighting strategy and tactics.  
2. Analyze the hazards and tactical considerations associated with given types of building construction.  
3. Explain the correlation of loads and stresses that are placed on building during fires and fire suppression activities.  
4. Identify the indicators of potential structural failure as they relate to fire fighter safety.  
5. Classify major types of building construction according to materials and methods used.

**FIP 146 Fire Protection Systems**

Class/Lab/Credit or Class/Lab/Exp./Credit  
3 2 4  
Prerequisites: None  
Corequisites: None  
This course Introduces various types of automatic sprinklers, standpipes, fire alarm systems, and fixed and portable extinguishing systems referenced in NFPA standard 25, including their operation, installation, and maintenance. Topics include wet and dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, including application, testing, and maintenance of Halon, carbon dioxide, dry chemical, and special extinguishing agents utilized in fixed and portable systems. Upon completion, students should be able to demonstrate a working knowledge of sprinkler and alarm systems, both fixed and portable, including appropriate application, operation, inspection, and maintenance requirements.  
Competencies  
• Student Learning Outcomes  
1. Identify the various types of automatic extinguishing systems.  
2. Describe the proper procedure to maintain an extinguishing system.  
3. Determine the design requirements for sprinklers and standpipes in a designated building.  
4. Demonstrate a working knowledge of various sprinklers and alarm systems.  
5. Define the proper application and maintenance of various sprinklers and alarm systems.

**FIP 162 Firefighter Safety and Wellness**  
3 0 3  
Prerequisites: None  
Corequisites: None  
The purpose of this course is to reduce firefighter injuries and fatalities by discussing topics that impact firefighter safety. Emphasis is placed on national standards, the 16 Life Safety Initiatives, and current events to identify changes needed to create a culture of safety. Upon completion, students should be able to define and describe the need for cultural and behavioral changes within the emergency services.

**FIP 176 HazMat: Operations**  
4 0 4  
Prerequisites: None  
Corequisites: None  
This course is designed to increase first responder awareness of the type, nature, physiological effects of, and defensive techniques for mitigation of HazMat incidents. Topics include recognition, identification, regulations and standards, zoning, resource usage, defensive operations, and other related topics. Upon completion, students should be able to recognize and identify the presence of hazardous materials and use proper defensive techniques for incident mitigation.  
Competencies  
• Student Learning Outcomes  
1. Describe the nature and physiological effects of a hazardous materials event.  
2. Describe defensive techniques for mitigation of a hazardous materials event.  
3. Demonstrate the ability to use the emergency response guide.  
4. Demonstrate the ability to recognize and identify the presence of hazardous materials.

**FIP 180 Wildland Fire Behavior**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course covers the principles of wildland fire behavior and meteorology referenced in NFPA standard 1143. Emphasis is placed on fire calculations, fuels, and related weather effects. Upon completion, students should be able to demonstrate and apply fire

behavior theories through written and performance evaluations.

#### Competencies

##### • Student Learning Outcomes

1. Determine the role of fuels, topography, and atmospheric conditions that leads to extreme fire behavior.
2. Define the important determinants of wildland fire occurrence and behavior.
3. Identify the fire's effects on and interactions with the ecosystem properties, processes, and components.
4. Analyze the social and political forces that affect wildland fire, and explain how they can be incorporated into land management decisions.
5. Demonstrate knowledge of risk/hazard Assessment and Mitigation concerning wildland fires.

#### FIP 184 Wildland Fire Safety

3 0 3

Prerequisites: None

Corequisites: None

This course covers safety principles used when working in the wildland fire environment referenced in NFPA standard 1143. Emphasis is placed on personal safety and working with equipment, aircraft, and fire-ground operations. Upon completion, students should be able to understand and demonstrate fire safety procedures through written and performance evaluations.

#### Competencies

##### • Student Learning Outcomes

1. Demonstrate knowledge of how the Incident Command System is used in relation to a major wildland fire scenario.
2. Demonstrate knowledge of safe practices of wildland firefighting.
3. Compare and contrast structural firefighting strategies and tactics with those of wildland fires.
4. Define the 18 Watch Out situation and 10 Standing Firefighting Orders in wildland firefighting.
5. Demonstrate the ability to gather research about wildland fire deaths in the United States.
6. Identify aircraft safety precautions during all phases of wildland firefighting.

#### FIP 220 Fire Fighting Strategies

3 0 3

Prerequisites: None

Corequisites: None

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector referenced in NFPA standards 1561, 1710, and 1720. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

#### Competencies

##### • Student Learning Outcomes

1. Identify and define the main functions within the National Incident Management System (NIMS) and how they interrelate during an incident.
2. Explain how pre-incident plan information is gathered using pre-formatted forms and methods for storing and retrieving pre-plan information.
3. Compare construction methods in terms of structural stability, fire extension, and fuel contribution.
4. Describe the 16 Firefighter Life Safety Initiatives and apply them to fire department operations.
5. Describe and compare offensive, defensive, and transitional fire attack methods for appropriate conditions and scenarios.

#### FIP 228 Local Govt. Finance

3 0 3

Prerequisites: None

Corequisites: None

This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operations of a department.

#### Competencies

##### • Student Learning Outcomes

1. Define the types of budgets and typical usage for each type.
2. Define and describe the different types of revenue fire departments receive including the advantages and disadvantages of each.
3. Develop and present a budget for a capital outlay.
4. Prepare a budget and written justification for the budget for presentation.
5. Define basic finance and budgeting principles in relation to governmental agencies.

#### FIP 229 Fire Dynamics and Combust.

3 0 3

Prerequisites: None

Corequisites: None

This course covers the theories and fundamentals of how and why fires start and spread, and how they are safely controlled reference in NFPA standard 1001. Topics include components of fire, fire sources, fire behavior, properties of combustible solids, classification of hazards, and the use of fire extinguishing agents. Upon completion, students should be able to describe the properties of matter and dynamics of fire, identify fuel sources, and compare suppressants and extinguishment techniques.

#### Competencies

##### • Student Learning Outcomes

1. Describe the theories and fundamentals of fire behavior.
2. Determine classifications of fire.
3. Describe the properties of matter and dynamics of fire.
4. Describe different fire sources and compare different suppressants and extinguishment techniques.

#### FIP 232 Water and Hydraulics Dist.

2 2 3

Prerequisites: None

Corequisites: None

This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices referenced in NFPA standard 25. Emphasis is placed on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate

knowledge of water distribution systems.

#### Competencies

##### • Student Learning Outcomes

1. Describe flow of water through various appliances.
2. Describe pumping system.
3. Demonstrate the ability to perform hydraulic calculations.
4. Demonstrate knowledge of a water distribution system.

## French

#### FRE 111 Elementary French I

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness.

*This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

#### FRE 112 Elementary French II

3 0 3

Prerequisites: FRE 111

Corequisites: None

This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## Geology

#### GEL 111 Geology

3 2 4

Prerequisites: None

Corequisites: None

This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. *This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

#### Competencies

1. Explain fundamental geologic concepts including earth structure, plate tectonics, rocks and minerals, rock cycle, crustal deformation, surficial processes, earth resources and geohazards.
2. Apply the basic methods of scientific inquiry in the context of geology.
3. Recognize and quantify the operation of Earth system processes over geologic and human timescales and over local, regional and global spatial scales.
4. Manipulate, interpret and construct visualizations of geologic data using maps, graphs, and contemporary technology.
5. Demonstrate an appreciation for the societal relevance of geology and the impact of humans on

## Gerontology

### GRO 120 Gerontology

3 0 3

Prerequisites: None

Corequisites: None

This course covers the psychological, social, and physical aspects of aging. Emphasis is placed on the factors that promote mental and physical well-being. Upon completion, students should be able to recognize the aging process and its psychological, social, and physical aspects.

## Graphic Design

### GRD 110 Typography I

2 2 3

Prerequisites: None

Corequisites: None

This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in design application, analysis, specification, and creation of typographic elements.

### GRD 113 History of Graphic Design

3 0 3

Prerequisites: None

Corequisites: None

This course covers the history of graphic design and visual communications. Topics include major trends, developments, influences, and directions. Upon completion, students should be able to understand, recognize, and analyze important historical and world-wide cultural influences found in today's marketing of ideas and products.

### GRD 121 Drawing Fundamentals I

1 3 2

Prerequisites: None

Corequisites: None

This course increases observation skills using basic drawing techniques and media in graphic design. Emphasis is placed on developing the use of graphic design principles, media applications, spatial considerations, drawing styles, and approaches. Upon completion, students should be able to show competence and proficiency in finished works.

### GRD 131 Illustration I

1 3 2

Prerequisites: ART 131, DES 125, or GRD 121

Corequisites: None

This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork.

### GRD 141 Graphic Design I

2 4 4

Prerequisites: None

Corequisites: None

This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and

### GRD 142 Graphic Design II

2 4 4

Prerequisites: ART 121, DES 135, or GRD 141

Corequisites: None

This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various designs, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

### GRD 151 Computer Design Basics

1 4 3

Prerequisites: None

Corequisites: None

This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic design problems. Upon completion, students should be able to use the computer as a creative tool.

### GRD 152 Computer Design Tech I

1 4 3

Prerequisites: GRD 151

Corequisites: None

This course covers complex design problems utilizing various design and drawing software applications. Topics include the expressive use of typography, image, and organization to communicate a message. Upon completion, students should be able to use appropriate computer software to professionally present their work.

### GRD 160 Photo Fundamentals I

1 4 3

Prerequisites: None

Corequisites: None

This course introduces basic camera operations, roll film processing, and photographic print production. Topics include contrast, depth-of-field, subject composition, enlarger operation, and density control. Upon completion, students should be able to produce photographic prints with acceptable density values and quality.

### GRD 180 Interactive Design

1 4 3

Prerequisites: GRD 151 or GRA 151

Corequisites: None

This course covers skills and techniques used in designing interactive presentations. Emphasis is placed on design, including interface design, color, illustration, scripting, audio, typography, and animated elements. Upon completion, students should be able to design and produce interactive presentations.

### GRD 241 Graphic Design III

2 4 4

Prerequisites: DES 136 or GRD 142

Corequisites: None

This course is an advanced exploration of various techniques and media for advertising and graphic design. Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon completion, students should be able to demonstrate competence and professionalism in visual problem solving.

### GRD 242 Graphic Design IV

2 4 4

Prerequisites: GRD 241

Corequisites: None

This course is a continuation of GRD 241. Emphasis is placed on using advanced media techniques, concepts, strategies, and professionalism in all aspects of design. Upon completion, students should be able to conceptualize, create, and produce designs for reproduction.

### GRD 249 Advanced Design Practice

1 9 4

Prerequisites: GRD 241

Corequisites: None

This course covers advanced techniques used in graphic design. Emphasis is placed on providing solutions to complex design problems. Upon completion, students should be able to demonstrate advanced levels of competence and professionalism in visual problem solving.

### GRD 263 Illustrative Imaging

1 4 3

Prerequisites: GRD 151 or GRA 151

Corequisites: None

This course covers the creative manipulation of images utilizing digital techniques of masking, layering, airbrushing, and painting. Topics include the aesthetic analysis of visual imagery as well as the legalities of manipulating images. Upon completion, students should be able to utilize software applications to creatively manipulate and illustratively build digital images which accomplish design objectives.

### GRD 271 Multimedia Design I

1 3 2

Prerequisites: GRD 151

Corequisites: None

This course introduces the fundamentals of multimedia design and production for computer-related presentations. Topics include interface design, typography, storyboarding, scripting, simple animation, graphics, digital audio/video, and copyright issues. Upon completion, students should be able to design and produce multimedia presentations.

### GRD 280 Portfolio Design

2 4 4

Prerequisites: GRD 142 and GRD 152 or GRA 152

Corequisites: None

This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a résumé and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

### GRD 281 Design of Advertising

2 0 2

Prerequisites: None

Corequisites: None

This course explores the origins, roles, scope, forms, and development of advertising. Emphasis is placed on advertising development from idea through production and the interrelationship of marketing to types of advertising, media, and organizational structure. Upon completion, students should be able to demonstrate an understanding of the complexities and relationships involved in advertising design.

### GRD 285 Client/Media Relations

1 2 2



Prerequisites: GRD 142 and GRD 152

Corequisites: None

This course introduces media pricing, scheduling, and business ethics. Emphasis is placed on communication with clients and determination of clients' advertising needs. Upon completion, students should be able to use professional communication skills to effectively orchestrate client/media relationships.

## Health

### HEA 110 Personal Health/Wellness

3 0 3

Prerequisites: None

Corequisites: None

This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

## Health Information Technology

### HIT 110 Intro to Healthcare and HIM

3 0 0 3

Prerequisites: None

Corequisites: None

This course introduces healthcare settings and the Health Information Management (HIM) professional's role in healthcare delivery systems. Topics include health information management operations in compliance with standards, regulations and accrediting body initiatives; healthcare providers and disciplines; and electronic health records (EHRs). Upon completion, students should be able to demonstrate an understanding of health information management and healthcare organizations, professions and trends.

### HIT 112 Health Law and Ethics

3 0 0 3

Prerequisites: None

Corequisites: None

This course covers the study of the judicial, legislative, and regulatory standards applicable to health care and health information processes. Topics include legal terminology, confidentiality, privacy, security, access and disclosure of health information, ethical implications, data stewardship, and the integrity of the legal health record. Upon completion, students should be able to apply policies, procedures and ethical standards in compliance with external forces.

### HIT 114 Health Data Sys/Standards

2 3 0 3

Prerequisites: None

Corequisites: None

This course covers concepts and techniques for managing and maintaining all health record formats including electronic health records (EHR). Topics include structure and use of health information including data collection and analysis, data sources/sets, archival systems, as well as quality and integrity of healthcare data. Upon completion, students should be able to determine compliance of health record

content and governance standards within the health organization.

### HIT 122 Prof Practice Exp I

0 0 3 1

Prerequisites: None

Corequisites: None

This course provides supervised and/or simulated health information technology clinical experience in healthcare settings. Emphasis is placed on practical application of HIM functions and core curriculum concepts. Upon completion, students should be able to apply health information theory to healthcare facility practices.

### HIT 124 Prof Practice Exp II

0 0 3 1

Prerequisites: None

Corequisites: None

This course provides supervised clinical experience in healthcare settings. Emphasis is placed on practical application of curriculum concepts to the healthcare setting. Upon completion, students should be able to apply health information theory to healthcare facility practices.

### HIT 210 Healthcare Statistics

2 2 0 3

Prerequisites: MAT 110 or 143

Corequisites: None

This course covers maintenance, compilation, analysis, and presentation of healthcare statistics and research protocols and techniques. Topics include basic statistical principles, indices, databases, registries, vital statistics, descriptive statistics, research protocol monitoring, Institutional Review Board processes, and knowledge-based research techniques. Upon completion, students should be able to apply, interpret, and present healthcare statistics and utilize research techniques to gather and interpret healthcare data.

### HIT 211 Diagnosis Coding & Reporting

2 3 0 3

Prerequisites: None

Corequisites: None

This course covers diagnostic coding and sequencing utilizing the current version of the ICD code set for inpatient, outpatient and ambulatory care settings. Emphasis is placed on the rules and conventions of the ICD official coding guidelines in relation to anatomy, physiology and disease processes. Upon completion, students should be able to accurately assign and sequence diagnosis codes in compliance with the ICD official coding guidelines for reporting statistical data, patient outcomes and reimbursement methodologies.

### HIT 213 Inpt Proc Coding & Reporting

1 3 0 2

Prerequisites: None

Corequisites: None

This course covers the application of coding guidelines as applied to the reporting of inpatient procedures. Emphasis is placed on the rules and conventions of the ICD-PCS code set utilizing the index and tables, in relation to anatomy and physiology to assign principal and secondary procedure codes in hospital inpatient settings. Upon completion, students should be able to accurately assign procedural codes according to the official ICD-PCS coding guidelines and evaluate compliance with regulatory requirements and reim-

bursement methodologies.

### HIT 214 OP Procedure Coding/Reporting

1 3 0 2

Prerequisites: HIT 211

Corequisites: None

This course covers application of coding and reporting standards as they apply to Current Procedural Terminology (CPT) guidelines and principles. Emphasis is placed on application of the coding guidelines, in relation to anatomy and physiology, for ambulatory healthcare settings. Upon completion, students should be able to assign CPT/HCPCS procedural codes according to official guidelines and evaluate compliance with regulatory requirements and reimbursement methodologies.

### HIT 215 Revenue Cycle Management

1 3 0 2

Prerequisites: None

Corequisites: None

This course covers the revenue cycle management process used in all healthcare settings as they relate to national billing, compliance, and reporting requirements. Topics include clinical documentation improvement, prospective payment systems, billing processes and procedures, chargemaster maintenance, regulatory guidelines, fraud and abuse, reimbursement monitoring, compliance strategies and reporting. Upon completion, students should be able to perform data quality reviews to validate code assignment and comply with reimbursement and reporting requirements.

### HIT 216 Quality Management

1 3 0 2

Prerequisites: HIT 114

Corequisites: None

This course introduces principles of quality assessment and improvement, and utilization, risk, and case management, in healthcare. Topics include Continuous Quality Improvement, and case management processes, data analysis/reporting techniques, credentialing, regulatory quality monitoring requirements, and outcome measures and monitoring. Upon completion, students should be able to abstract, analyze, and report clinical data for facility-wide quality management/performance improvement programs and monitor compliance measures.

### HIT 217 Quality & Data Analysis

2 3 0 3

Prerequisites: MAT 152

Corequisites: None

This course covers the principles of quality assessment and improvement, including data analysis and decision making in healthcare. Topics include healthcare statistics, continuous quality improvement, data analysis and reporting techniques, quality and outcome metric monitoring. Upon completion, students should be able to compute healthcare statistics, abstract, analyze and report clinical data for organization-wide quality and performance improvement programs for compliance purposes.

### HIT 218 Mgmt Principles in HIT

3 0 0 3

Class/Lab/Credit or Class/Lab/Exp./Credit

Prerequisites: None

Corequisites: None

This course covers organizational management concepts as applied to healthcare settings. Topics include leadership skills, managing organizational change, best practices, decision-making, financial management, cultural diversity, ethics, consumer engagement, and workforce training. Upon completion, students should be able to apply management, leadership, and supervisory concepts to various healthcare settings.

#### HIT 220 Health Informatics & EHRs

1 2 0 2

Prerequisites: Take One Set:

Set 1: HIT-114 and CIS-110

Set 2: HIT-114 and CIS-111

Corequisites: None

This course covers EHR systems, design, implementation and application. Topics include EHR, Informatics, speech & imaging technology, information/network security & integrity, data dictionaries, modeling and warehousing. Upon completion, students should be able to facilitate usage of electronic health record systems and other technologies.

#### HIT 221 Lifecycle of EHR

2 2 0 3

Prerequisites: None

Corequisites: None

This course covers the concepts and features of an electronic health record (EHR) system in integrated delivery networks. Topics include administrative and clinical functions such as patient management, privacy and security aspects, clinical documentation and reporting, coding and billing, data management and analytics, CDSS and quality improvement, and implementation of electronic health record systems. Upon completion, students should be able to understand the principles of an EHR and how to utilize EHR software to improve the quality and efficiency of operations in healthcare.

#### HIT 222 Prof Practice Exp III

0 0 6 2

Prerequisites: HIT 122

Corequisites: None

This course provides supervised and/or simulated health information technology clinical experience in healthcare settings. Emphasis is placed on practical application of HIM functions and core curriculum concepts. Upon completion, students should be able to apply health information theory to healthcare facility practices.

#### HIT 225 Healthcare Informatics

2 3 0 3

Prerequisites: None

Corequisites: None

This course covers data analysis to support decision making, patient care, and regulatory compliance. Topics include clinical terminology and vocabulary systems, data capture methodology, data presentation and reporting, and initiatives to improve the quality of patient care. Upon completion, students should be able to identify data elements and sets, analyze capture methodology in healthcare settings, analyze compliance issues and make improvement

Class/Lab/Credit or Class/Lab/Exp./Credit  
recommendations.

#### HIT 226 Pathophysiology & Pharmacology

2 3 0 3

Prerequisites: BIO 163 or BIO 166

or BIO 169

Corequisites: None

This course covers principles of disease and the associated pharmacological treatments. Emphasis is placed on physical signs and symptoms, prognoses, common complications and therapeutic options. Upon completion, students should be able to relate disease processes to physical signs and symptoms, prognosis, common complications and their management.

#### HIT 227 Informatics Project Mgt.

2 2 0 3

Prerequisites: None

Corequisites: None

This course covers the required skills needed for implementing healthcare IT applications, with emphasis on electronic health records (EHR). Topics include leadership development skills, interdisciplinary collaboration, organizational change management, project management software, and the study of communication skills required across healthcare disciplines. Upon completion, students should be able to effectively collaborate and communicate with healthcare disciplines to implement informatics projects within the healthcare setting.

#### HIT 280 Professional Issues

2 0 0 2

Prerequisites: HIT 211 and must be during the last semester of program

Corequisites: None

This course provides a comprehensive discussion of topics common to the health information profession. Emphasis is placed on application of professional competencies, job search tools, and preparation for the certification examination. Upon completion, students should be able to demonstrate competence in entry-level domains and subdomains for health information technologies.

## Healthcare Management

#### HMT 110 Intro to Healthcare Mgt.

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the functions, practices, organizational structures, and professional issues in healthcare management. Emphasis is placed on planning, controlling, directing, and communicating within health and human services organizations. Upon completion, students should be able to apply the concepts of management within a healthcare service environment.

#### HMT 210 Medical Insurance

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the concepts of medical insurance. Topics include types and characteristics of third-party payers, coding concepts, payment systems, and manual/electronic claims form preparation. Upon completion, students should be able to process third-

Class/Lab/Credit or Class/Lab/Exp./Credit

party claims forms.

#### HMT 211 Longterm Care Admin.

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the administration of long-term care facilities and services. Emphasis is placed on nursing home care, home health care, hospice, skilled nursing facilities, and other long-term care services. Upon completion, students should be able to distinguish between the different long-term care offerings, criteria for use, and benefits of the patient, resident, and participant.

#### HMT 211 Longterm Care Admin.

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the administration of long-term care facilities and services. Emphasis is placed on nursing home care, home health care, hospice, skilled nursing facilities, and other long-term care services. Upon completion, students should be able to distinguish between the different long-term care offerings, criteria for use, and benefits of the patient, resident, and participant.

## History

#### HIS 111 World Civilizations I

3 0 3

Prerequisites: None

Corequisites: None

This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations.

*This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

#### HIS 112 World Civilizations II

3 0 3

Prerequisites: None

Corequisites: None

This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations.

*This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

#### HIS 131 American History I

3 0 3

Prerequisites: None

Corequisites: None

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history.

*This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. (\*VLC)*



**HIS 132 American History II**

3 0 3

Prerequisites: None

Corequisites: None

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. \*VLC)*

**Humanities****HUM 110 Technology and Society**

3 0 3

Prerequisites: None

Corequisites: None

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology. *This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. This course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.*

**HUM 115 Critical Thinking**

3 0 3

Prerequisites: Take One Set

Set 1: DRE 098

Set 2: ENG 090 and RED 090

Set 3: ENG 095

Corequisites: None

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

**HUM 120 Cultural Studies**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

**HUM 122 Southern Culture**

3 0 3

Prerequisites: None

Corequisites: None

This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify

the characteristics that distinguish Southern culture.

*This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**Hydraulics****HYD 110****Hydraulics/Pneumatics I**

2 3 3

Prerequisites: None

Corequisites: None

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting. Emphasis will be placed on drawing of hydraulic and pneumatic circuits. Competencies

Student Learning Outcomes

1. Identify and demonstrate safe practices and procedures with tools, materials and industry accepted test equipment covered in the course.
2. Demonstrate appropriate use of test equipment, evaluate circuit performance and apply appropriate troubleshooting techniques to fluid power systems.
3. Identify components of fluid power systems using symbols and schematics.
4. Assemble a fluid power system.
5. Calculate and demonstrate the basic physics of fluid mechanics.

**Industrial Science****ISC 112 Industrial Safety**

2 0 2

Prerequisites: None

Corequisites: None

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance. Competencies

Student Learning Outcomes

1. Describe and identify safety practices required to perform various job-related activities.
2. Describe the application of OSHA procedures and requirements for compliance. (\*VLC)

**ISC 115 Construction Safety**

2 0 2

Prerequisites: None

Corequisites: None

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds, and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of applicable safety regulations and safely participate in construction projects.

**ISC 121 Envir Health & Safety**

3 0 3

Prerequisites: None

Corequisites: None

This course covers workplace environmental, health, and safety issues. Emphasis is placed on managing the implementation and enforcement of environmental

health and safety regulations and on preventing accidents, injuries, and illnesses. Upon completion, students should be able to demonstrate an understanding of basic concepts of environmental, health, and safety issues.

**ISC 130 Intro to Quality Control**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the philosophies, principles, and techniques of managing quality. Topics include the functions, responsibilities, structures, costs, reports, personnel, and vendor-customer relationships associated with quality control and management. Upon completion, students should be able to demonstrate an understanding of quality control and management.

**ISC 210 Oper & Prod Planning**

3 0 3

Prerequisites: None

Corequisites: None

This course includes the fundamentals of operations and production planning, forecasting, and scheduling. Topics include demand management, production planning and control, scheduling, and budgeting. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques involved in operations and production planning. *This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.*

**Machining****MAC 114 Introduction to Metrology**

2 0 2

Prerequisites: None

Corequisites: None

This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

**MAC 121 Intro to CNC**

2 0 2

Prerequisites: None

Corequisites: None

This course introduces the concepts and capabilities of computer numerical control machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to explain operator safety, machine protection, data input, program preparation, and program storage.

**MAC 122 CNC Turning**

1 3 2

Prerequisites: None

Corequisites: None

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

**MAC 124 CNC Milling**

1 3 2

Prerequisites: None

Corequisites: None  
This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

### MAC 141 Machining Applications I

2 6 4  
Prerequisites: None  
Corequisites: : None  
This course provides an introduction to a variety of material-working processes that are common to the machining industry. Topics include safety, process-specific machining equipment, measurement devices, set-up and layout instruments, and common shop practices. Upon completion, students should be able to safely demonstrate basic machining operations, accurately measure components, and effectively use layout instruments.

### MAC 142 Machining Applications II

2 6 4  
Prerequisites: None  
Corequisites: : None  
This course provides instruction in the wide variety of processes associated with machining. Topics include safety, equipment set-up, holding fixtures, tooling, cutting speeds and depths, metal properties, and proper finishes. Upon completion, students should be able to safely demonstrate advanced machining operations, accurately measure components, and produce accurate components with a proper finish.

### MAC 143 Machining Applications III

2 6 4  
Prerequisites: None  
Corequisites: : None  
This course provides instruction in the field of advanced machining. Emphasis is placed on creating complex components, close-tolerance machining, precise measurement, and proper equipment usage. Upon completion, students should be able to demonstrate the ability to produce an accurately machined component with a quality finish using the proper machining process.

### MAC 151 Machining Calculations

1 2 2  
Prerequisites: None  
Corequisites: None  
This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.

### MAC 152 Adv Machining Calc

1 2 2  
Prerequisites: None  
Corequisites: None  
This course combines mathematical functions with practical machine shop applications and problems. Emphasis is placed on gear ratios, lead screws, indexing problems, and their applications in the machine shop. Upon completion, students should be able to calculate solutions to machining problems.

### MAC 222 Advanced CNC Turning

1 3 2  
Prerequisites: None  
Corequisites: None  
This course covers advanced methods in setup and

operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers.

### MAC 224 Advanced CNC Milling

1 3 2  
Prerequisites: MAC 124  
Corequisites: None  
This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.

### MAC 231 CAM: CNC Turning

1 4 3  
Prerequisite: None  
Corequisites: None  
This course introduces Computer Numerical Control graphics programming and concepts for turning center applications. Emphasis is placed on the interaction of menus to develop a shape file in a graphics CAM system and to develop tool path geometry and part geometry. Upon completion, students should be able to develop a job plan using CAM software, including machine selection, tool selection, operational sequence, speed, feed, and cutting depth.

### MAC 232 CAM: CNC Milling

1 4 3  
Prerequisite: None  
Corequisites: None  
This course introduces Computer Numerical Control graphics programming and concepts for machining center applications. Emphasis is placed on developing a shape file in a graphics CAM system and transferring coded information from CAM graphics to the CNC milling center. Upon completion, students should be able to develop a complete job plan using CAM software to create a multi-axis CNC program.

### MAC 247 Production Tooling

2 0 2  
Prerequisites: None  
Corequisites: None  
This course provides advanced study in tooling currently utilized in the production of metal parts. Emphasis is placed on the proper use of tooling used on CNC and other production machine tools. Upon completion, students should be able to choose proper tool grades based on manufacturing requirements and troubleshoot carbide tooling problems.

## Maintenance

### MNT 110 Intro to Maint Procedures

1 3 2  
Prerequisite: None  
Corequisites: None  
This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

Competencies  
Student Learning Outcomes  
•1. Identify and demonstrate safe practices and procedures with tools, materials and industry accepted

test equipment covered in the course.  
•2. Identify and demonstrate use of hand tools.  
•3. Identify grades of bolts and fasteners and demonstrate proper tightening techniques  
•4. Describe the operation of and assemble mechanical power transmissions and systems.  
•5. Identify bearings, seals, gaskets, and packing material and demonstrate appropriate assembly techniques.  
•6. Perform preventative and predictive maintenance and mechanical troubleshooting.

## Mathematics

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.*

### MAT 003 Transition Math

0 6 3  
Prerequisites: None  
Corequisites: None  
This course provides an opportunity to customize foundational math content in specific math areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in their gateway level math courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

### MAT 010 Math Measurement and Literacy Support

0 2 1  
Prerequisites: None  
Corequisites: None  
This course provides an opportunity to customize foundational math content specific to Math Measurement & Literacy. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Math Measurement & Literacy by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

### MAT 021 Algebra/Trigonometry I Support

1 2 2  
Prerequisites: None  
Corequisites: None  
This course provides an opportunity to customize foundational math content specific to Algebra and Trigonometry I. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Algebra/Trigonometry I by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

### MAT 043 Quantitative Literacy Support

1 2 2  
Prerequisites: None  
Corequisites: None  
This course provides an opportunity to customize

foundational math content specific to Quantitative Literacy. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Quantitative Literacy by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

**MAT 052 Statistical Methods I Support**  
1 2 2

Prerequisites: None

Corequisites: None

This course provides an opportunity to customize foundational math content specific to Statistical Methods I. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Statistical Methods I by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

**MAT 071 Pre-Calculus Algebra Support**  
0 4 2

Prerequisites: None

Corequisites: None

This course provides an opportunity to customize foundational math content specific to Precalculus Algebra. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Precalculus Algebra by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

**MAT 110 Math Measurement & Literacy**  
2 2 3

Prerequisites: Take one set:

Set 1: DMA-010, DMA-020, and DMA-030

Set 2: DMA-025

Set 3: MAT-003

Set 4: BSP-4003

Corequisites: Take MAT-010

This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

**Competencies**

**Student Learning Outcomes**

1. Demonstrate estimation skills and justify results.
2. Use dimensional analysis to convert units of measurement.
3. Employ fractions, percentages and proportions to solve contextual problems.
4. Compute geometric measurements of perimeter, area, volume and angles.
5. Use technology to analyze and interpret elements of personal finance.
6. Compare and contrast measures of center and measures of dispersion.
7. Interpret tables, charts, and graphs and communicate results.

**MAT 121 Algebra and Trigonometry I**  
2 2 3

Prerequisites: Take one set:

Set 1: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050

Set 2: DMA-025, DMA-040, DMA-050

Set 3: DMA-025, DMA-045

Set 4: DMA-010, DMA-020, DMA-030, DMA-045

Set 5: MAT-003

Set 6: BSP-4003

Corequisites: Take MAT-021

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include the properties of plane and solid geometry, area and volume, and basic proportion applications; simplification, evaluation, and solving of algebraic equations and inequalities and radical functions; complex numbers; right triangle trigonometry; and systems of equations. Upon completion, students will be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.

**Competencies**

**Student Learning Outcomes**

1. Use geometric principles to solve industrial application problems involving perimeter, area, and volume.
2. Employ basic algebraic operations to simplify, evaluate, and solve proportions, radical and other algebraic functions, equations, and inequalities.
3. Perform basic algebraic operations involving complex numbers.
4. Solve applied problems using trigonometric principles involving right triangles.
5. Solve applied problems using systems of equations involving two and three variables.
6. Use technology to solve practical problems and communicate results.

**MAT 122 Algebra/Trigonometry II**  
2 2 3

Prerequisites: MAT 121, 161, 171, or 175

Corequisites: None

This course extends the concepts covered in MAT 121 to include additional topics in algebra, function analysis, and trigonometry. Topics include exponential and logarithmic functions, translation and scaling of functions, Sine Law, Cosine Law, vectors, and statistics. Upon completion, students should be able to demonstrate an understanding of the use of technology to solve problems and to analyze and communicate results.

**MAT 143 Quantitative Literacy**  
2 2 3

Prerequisites: Take One Set:

Set 1: DMA-010, DMA-020, DMA-030, and DRE-098

Set 2: DMA-010, DMA-020, DMA-030, and ENG-002

Set 3: DMA-010, DMA-020, DMA-030, and BSP-4002

Set 4: DMA-025, and DRE-098

Set 5: DMA-025, and ENG-002

Set 6: DMA-025, and BSP-4002

Set 7: MAT-003 and DRE-098

Set 8: MAT-003 and ENG-002

Set 9: MAT-003 and BSP-4002

Set 10: BSP-4003 and DRE-098

Set 11: BSP-4003 and ENG-002

Set 12: BSP-4003 and BSP-4002

Corequisites: Take MAT-043

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based

assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life. *This course has been approved for transfer under the CAA as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the ICAA as a general education course in Mathematics (Quantitative).*

**Competencies**

**Student Learning Outcomes**

1. Judge the reasonableness of results using estimation, logical processes, and a proper understanding of quantity
2. Utilize proportional reasoning to solve contextual problems and make conversions involving various units of measurement
3. Identify, interpret, and compare linear and exponential rates of growth to make predictions and informed decisions based on data and graphs
4. Differentiate between simple and compound interest and analyze the long-term effects of saving, investing, and borrowing
5. Describe, analyze, and interpret statistical information such as graphs, tables, and summarized data to draw appropriate conclusions when presented with actual statistical studies
6. Determine probabilities and expected values and use them to assess risk and make informed decisions
7. Analyze civic and/or societal issues and critique decisions using relevant mathematics.

**MAT 152 Statistical Methods I**  
3 2 4

Prerequisites: Take One Set:

Set 1: DMA-010, DMA-020, DMA-030, and DRE-098

Set 2: DMA-010, DMA-020, DMA-030, and ENG-002

Set 3: DMA-010, DMA-020, DMA-030, and BSP-4002

Set 4: DMA-025, and DRE-098

Set 5: DMA-025, and ENG-002

Set 6: DMA-025, and BSP-4002

Set 7: MAT-003 and DRE-098

Set 8: MAT-003 and ENG-002

Set 9: MAT-003 and BSP-4002

Set 10: BSP-4003 and DRE-098

Set 11: BSP-4003 and ENG-002

Set 12: BSP-4003 and BSP-4002

Corequisites: Take MAT-052

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results. *This course has been approved for transfer under the CAA as a general education course in Mathematics (Quantitative). This course has been approved for transfer under the ICAA as a general education course in Mathematics (Quantitative).*

**Competencies**

**Student Learning Outcomes**

1. Organize, display, calculate, and interpret descriptive statistics
2. Apply basic rules of probability
3. Identify and apply appropriate probability distributions
4. Perform regression analysis



- Analyze sample data to draw inferences about a population parameter
- Communicate results through a variety of media.

**MAT 171 Precalculus Algebra**

3 2 4

Prerequisites: Take One Set:

Set 1: DMA-010, DMA-020, DMA-030, DMA-040, DMA-050

Set 2: DMA-010, DMA-020, DMA-030, DMA-045

Set 3: DMA-025, DMA-045

Set 4: DMA-025, DMA-040, DMA-050

Set 5: MAT 121

Set 6: MAT-003

Set 7: BSP-4003

Corequisites: Take MAT-071

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology. *This course has been approved for transfer under the CAA as a general education course in Mathematics. This course has been approved for transfer under the ICAA as a general education course in Mathematics.*

## Competencies

## Student Learning Outcomes

- Use analytical, graphical, and numerical representations to solve absolute value, radical, polynomial, rational, exponential, and logarithmic equations with both real and complex solutions.
- Use analytical, graphical, and numerical representations to solve absolute value, polynomial and rational inequalities with real solutions.
- Use analytical, graphical, and numerical representations to analyze absolute value, radical, polynomial, rational, exponential and logarithmic functions with both real and complex zeros.
- Use multiple methods to solve problems involving systems of equations and apply to decomposing partial fractions.
- Construct the composition and inverse of functions.
- Use polynomial, exponential and logarithmic functions to model various real world situations in order to analyze, draw conclusions, and make predictions.

**MAT 172 Precalculus Trigonometry**

3 2 4

Prerequisites: MAT 171

Corequisites: None

This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## Competencies

## Student Learning Outcomes

- Use the unit circle and right triangle definitions to evaluate and graph trigonometric functions and their inverses, to derive trigonometric identities, and to simplify trigonometric expressions.

- Use multiple methods to solve problems involving trigonometric equations, right triangles, and oblique triangles.
- Demonstrate knowledge of vector definitions and perform vector operations.
- Convert equations and graphs between rectangular and polar coordinate systems, and apply to complex numbers.
- Use multiple representations to define, construct and analyze conic sections.
- Create, graph, and analyze parametric equations.

**MAT 271 Calculus I**

3 2 4

Prerequisites: MAT 172

Corequisites: None

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## Competencies

## Student Learning Outcomes

- Apply the definition of limit to evaluate limits by multiple methods and use it to derive the definition and rules for differentiation and integration.
- Use derivatives to analyze and graph algebraic and transcendental functions.
- Select and apply appropriate models and differentiation techniques to solve problems involving algebraic and transcendental functions; these problems will include but are not limited to applications involving optimization and related rates.
- Apply the definition of indefinite integral to solve basic differential equations.
- Apply the definition of definite integral to evaluate basic integrals.
- Use the fundamental theorem of calculus to evaluate integrals involving algebraic and transcendental functions.

**MAT 272 Calculus II**

3 2 4

Prerequisites: MAT 271

Corequisites: None

This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## Competencies

## Student Learning Outcomes

- Select and apply appropriate models and integration techniques to solve problems involving algebraic and transcendental functions; these problems will include but are not limited to applications involving volume, arc length, surface area, centroids, force and work.
- Evaluate proper and improper integrals using various integration techniques.
- Analyze the convergence and divergence of infinite sequences and series and find the Taylor and McLaurin representations for transcendental functions.
- Use differentiation and integration to analyze the graphs of polar form equations and parametric form

equations.

- Solve separable and first-order linear differential equations.
- Analyze and graph conic sections using calculus techniques.

**MAT 273 Calculus III**

3 2 4

Prerequisites: MAT 272

Corequisites: None

This course is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions, partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding the solution to multivariate-related problems with and without technology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in natural sciences/mathematics.*

## Competencies

## Student Learning Outcomes

- Perform operations with vectors in two and three dimensional space and apply to analytic geometry.
- Differentiate and integrate vector-valued functions and apply calculus to motion problems in two and three dimensional space.
- Determine the limits, derivatives, gradients, and integrals of multivariate functions.
- Solve problems in multiple integration using rectangular, cylindrical, and spherical coordinate systems.
- Select and apply appropriate models and techniques to define and evaluate line and surface integrals; these techniques will include but are not limited to Green's, Divergence, and Stoke's theorems.
- Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

**MAT 280 Linear Algebra**

2 2 3

Prerequisites: MAT 271

Corequisites: None

This course provides an introduction to linear algebra topics. Emphasis is placed on the development of abstract concepts and applications for vectors, systems of equations, matrices, determinants, vector spaces, multi-dimensional linear transformations, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to linear algebra-related problems with and without technology.

## Competencies

## Student Learning Outcomes

- Use analytical and graphical representations to apply vector operations in multiple-dimensions.
- Solve systems of linear equations using multiple manual and technology-based methods; these methods will include but are not limited to Gaussian and Gauss-Jordan.
- Use eigenvalues, eigenvectors and diagonalization to solve problems in appropriate situations.
- Use matrix operations and linear transformations to solve problems in appropriate situations.
- Demonstrate knowledge of orthogonal projections and orthogonal complements of subspaces, and apply to appropriate situations.
- Use the fundamental concept of a basis for a subspace to give a precise definition of dimensions and rank, and to solve problems in appropriate situations.
- Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

*College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective*

**MAT 285 Differential Equations**

2 2 3

Prerequisites: MAT 272

Corequisites: None

This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the development of abstract concepts and applications for first-order and linear higher-order differential equations, systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and LaPlace transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to differential equations-related problems with and without technology.

Competencies

Student Learning Outcomes

1. Find general solutions to first-order, second-order, and higher-order homogeneous and non-homogeneous differential equations by manual and technology-based methods.
2. Identify and apply initial and boundary values to find particular solutions to first-order, second-order, and higher order homogeneous and non-homogeneous differential equations by manual and technology-based methods, and analyze and interpret the results.
3. Select and apply appropriate methods to solve differential equations; these methods will include, but are not limited to, undetermined coefficients, variation of parameters, eigenvalues and eigenvectors, LaPlace and inverse LaPlace transforms.
4. Select and apply series techniques to solve differential equations; these techniques will include but are not limited to Taylor series.
5. Select and apply numerical analysis techniques to solve differential equations; these techniques will include but are not limited to Euler, Improved Euler, and Runge-Kutta.
6. Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

*College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**Mechanical****MEC 111 Machine Processes I**

1 4 3

Prerequisites: None

Corequisites: None

This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to safely manufacture simple parts to specified tolerances.

**MEC 112 Machine Processes II**

2 3 3

Prerequisites: MEC 111

Corequisites: None

This course covers advanced use of milling machines and lathes. Emphasis is placed on safety and compound setup of milling machines and lathes for manufacture of projects with a specified fit. Upon completion, students should be able to demonstrate proper procedures for manufacture of assembled parts

**MEC 130 Mechanisms**

2 3 3

Prerequisites: None

Corequisites: None

This course introduces the purpose and action of various mechanical devices. Topics include cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, lubricants, and other devices. Upon completion, students should be able to analyze, maintain, and troubleshoot the components of mechanical systems.

**MEC 141 Intro Mfg Processes**

2 2 3

Prerequisites: None

Corequisites: None

This course covers the properties and characteristics of manufacturing materials and the processes used to form them. Emphasis is placed on manufacturing materials, heat-treating processes, and manufacturing processes. Upon completion, students should be able to identify physical characteristics of materials and describe processes used to manufacture a part.

**MEC 142 Physical Metallurgy**

1 2 2

Prerequisites: None

Corequisites: None

This course covers the heat treating of metals. Emphasis is placed on the effects of hardening, tempering, and annealing on the structure and physical properties of metals. Upon completion, students should be able to heat treat materials.

**MEC 161 Manufacturing Processes I**

3 0 3

Prerequisites: None

Corequisites: None

This course provides the fundamental principles of value-added processing of materials into usable forms for the customer. Topics include material properties and traditional and non-traditional manufacturing processes. Upon completion, students should be able to specify appropriate manufacturing processing for common engineering materials.

Competencies

Student Learning Outcomes

1. Distinguish various primary metal working processes.
2. Compare and contrast various welding processes.
3. Compare and contrast various material finishing
4. Compare and contrast testing techniques.

**Medical****MED 120 Survey of Med Terminology**

2 0 2

Prerequisites: None

Corequisites: None

This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

**MED 121 Medical Terminology I**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. (\*VLC)

**MED 122 Medical Terminology II**

3 0 3

Prerequisites: MED 121

Corequisites: None

This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. (\*VLC)

**Marketing and Retailing****MKT 120 Principles of Marketing**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making. (\*VLC)

Competencies

Student Learning Outcomes

1. Define the role of marketing in business.
2. Explain the role of selling, customer relations and product management in marketing.
3. Describe marketing.
4. Define pricing and channel management strategies.

**MKT 121 Retailing**

3 0 3

Prerequisites: None

Corequisites: None

This course examines the role of retailing in the economy. Topics include the development of present retail structure, functions performed, effective operations, and managerial problems resulting from current economic and social trends. Upon completion, students should be able to demonstrate an understanding of the basic principles of retailing.

**MKT 122 Visual Merchandising**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces basic layout design and commercial display in retail and service organizations. Topics include an analysis of display as a visual merchandising medium and an examination of the principles and applications of display and design. Upon completion, students should be able to plan, build, and evaluate designs and displays. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*

**MKT 123 Fundamentals of Selling**

3 0 3

Prerequisites: None

Corequisites: None

This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered. (\*VLC)

#### Competencies

#### Student Learning Outcomes

1. Identify appropriate sales techniques for various selling situations.
2. Describe sales techniques.
3. Explain the necessity of selling skills in modern business environment.

#### MKT 220 Advertising and Sales Promotion

3 0 3  
Prerequisites: None  
Corequisites: None

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application. (\*VLC)

#### MKT 223 Customer Service

3 0 3  
Prerequisites: None  
Corequisites: : None

This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

#### MKT 224 International Marketing

3 0 3  
Prerequisites: None  
Corequisites: None

This course covers the basic concepts of international marketing activity and theory. Topics include product promotion, placement, and pricing strategies in the international marketing environment. Upon completion, students should be able to demonstrate a basic understanding of the concepts covered.

#### MKT 225 Marketing Research

3 0 3  
Prerequisites: MKT 120  
Corequisites: None

This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program. (\*VLC)*

#### Competencies

#### Student Learning Outcomes

1. Design and conduct a marketing research project.
2. Interpret results of a marketing research project.
3. Apply marketing research as a tool in decision making.
4. Define procedures for developing, analyzing, and using data.

#### MKT 227 Marketing Applications

3 0 3

Prerequisites: None  
Corequisites: None

This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy. *This course is a unique concentration requirement of the Marketing and Retailing concentration in the Business Administration program.*

#### Competencies

#### Student Learning Outcomes

1. Formulate marketing strategy.
2. Apply diverse marketing strategies case studies and small-group projects.
3. Define diverse marketing strategies.

#### MKT 230 Public Relations

3 0 3  
Prerequisites: None  
Corequisites: : None

This course introduces public relations as it affects communications, strategic planning, and management of the organization. Topics include basic principles and functions of management that guide public relations activities as applied to businesses, services, institutions, and associations. Upon completion, students should be able to perform the communications, evaluation, planning, and research activities of the public relations professional.

#### MKT 232 Social Media Marketing

3 2 4  
Prerequisites: None  
Corequisites: : None

This course is designed to build students' social media marketing skills by utilizing projects that give students hands on experience implementing social media marketing strategies. Topics include integrating different social media technologies into a marketing plan, creating social media marketing campaigns, and applying appropriate social media tools. Upon completion, students should be able to use social media technologies to create and improve marketing efforts for businesses.

#### Competencies

#### Student Learning Outcomes

1. Integrate different social media techniques into a marketing plan.
2. Describe social media marketing strategies.
3. Create a social media marketing campaign, applying appropriate social media tools.
4. Create a plan to improve marketing efforts for businesses using social media.

## Maintenance

#### MNT 110 Intro to Maint Procedures

1 3 2  
Prerequisites: None  
Corequisites: None

This course covers basic maintenance fundamentals for power transmission equipment. Topics include equipment inspection, lubrication, alignment, and other scheduled maintenance procedures. Upon completion, students should be able to demonstrate knowledge of accepted maintenance procedures and practices according to current industry standards.

#### Competencies

#### Student Learning Outcomes

1. Identify and demonstrate safe practices and procedures with tools, materials and industry

accepted test equipment covered in the course.

2. Identify and demonstrate use of hand tools.
3. Identify grades of bolts and fasteners and demonstrate proper tightening techniques
4. Describe the operation of and assemble mechanical power transmissions and systems.
5. Identify bearings, seals, gaskets, and packing material and demonstrate appropriate assembly techniques.
6. Perform preventative and predictive maintenance and mechanical troubleshooting.

## Music

#### MUS 110 Music Appreciation

3 0 3  
Prerequisites: None  
Corequisites: None

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. (\*VLC)*

#### MUS 112 Introduction to Jazz

3 0 3

Prerequisite: None

Corequisites: None

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

#### MUS 210 History of Rock Music

3 0 3

Prerequisite: None

Corequisites: None

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras.

## Nurse Aide

#### NAS 101 Nurse Aide I

3 4 3 6

Prerequisites: May be required to take transition/co-requisite classes based on RISE criteria

Corequisites: None

This course includes basic nursing skills required to provide safe, competent personal care for individuals. Emphasis is placed on person-centered care, the aging process, communication, safety/emergencies, infection prevention, legal and ethical issues, vital signs, height and weight measurements, elimination, nutrition, basic restorative care/rehabilitation, dementia, mental health and end-of-life care. Upon completion, students should be able to demonstrate knowledge and skills and be eligible to test for listing



on the North Carolina Nurse Aide I Registry. *This is a certificate-level course.*

### NAS 102 Nurse Aide II

3 2 6 6

Prerequisites: High school diploma or GED and currently listed as NA I with State of North Carolina

Corequisites: None

This course provides training in Nurse Aide II tasks. Emphasis is placed on the role of the Nurse Aide II, sterile technique and specific tasks such as urinary catheterization, wound care, respiratory procedures, ostomy care, peripheral IV assistive activities, and alternative feeding methods. Upon completion, students should be able to demonstrate knowledge and skills and safe performance of skills necessary to be eligible for listing on the North Carolina Nurse Aide II Registry. *This is a certificate-level course.*

### NAS 103 Home Health Care Nurse Aide

4 4 0 6

Prerequisites: NAS 101

Corequisites: None

This course provides advanced training for the currently listed Nurse Aide I enhancing specific skills needed when working in the home care setting. Topics include person-centered care, nutrition, hydration, patient and personal safety, mental health, dementia, behavioral challenges, pain management, palliative care, and stress management. Upon completion, students are eligible for listing as a home care nurse aide with the North Carolina Nurse Aide Registry. *This is a certificate-level course.*

## Networking Technology

### NET 125 Networking Basics

1 4 3

Prerequisites: None

Corequisites: None

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

## Network Operating Systems

### NOS 110 Operating System Concepts

2 3 3

Prerequisites: None

Corequisites: None

This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is placed on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems.

### NOS 120 Linux/UNIX Single User

2 2 3

Prerequisites: None

Corequisites: None

This course develops the necessary skills for students

to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

### NOS 130 Windows Single User

2 2 3

Prerequisites: None

Corequisites: None

This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

### NOS 230 Windows Admin I

2 2 3

Prerequisites: None

Corequisites: None

This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system.

## Nursing

### NUR 101 Practical Nursing I

7 6 6 11

Prerequisites: Admission to the P.N.E. Program

Corequisites: BIO 168, ACA 115, PSY 150

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including assessment, clinical decision making, professional behaviors, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching/learning, safety, ethical principles, legal issues, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course. *This is a diploma-level course.*

### NUR 102 Practical Nursing II

7 0 9 10

Prerequisites: NUR 101, BIO 168, PSY 150

Corequisites: ENG 111, BIO 169

This course is designed to further develop the concepts within the three domains of the individual, nursing, and healthcare. Emphasis is placed on the concepts within each domain including clinical decision making, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching and learning, accountability, safety, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course. *This is a diploma-level course.*

### NUR 103 Practical Nursing III

6 0 9 9

Prerequisites: NUR 102

Corequisites: None

This course is designed to assimilate the concepts within the three domains of the individual, healthcare,

and nursing. Emphasis is placed on biophysical and psychosocial concepts, professional behaviors, healthcare systems, health policy, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide safe, quality, and individualized entry level nursing care. *This is a diploma-level course.*

### NUR 111 Intro to Health Concepts

4 6 6 8

Prerequisites: Admission to ADN Program

Corequisites: BIO 168, PSY 150, ACA 115

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### NUR 112 Health Illness Concepts

3 0 6 5

Prerequisites: NUR 111

Corequisites: BIO 169

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### NUR 113 Family Health Concepts

3 0 6 5

Prerequisites: NUR 111, NUR 112, NUR 114, NUR 211

Corequisites: BIO 175, ENG 112

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### NUR 114 Holistic Health Concepts

3 0 6 5

Prerequisites: NUR 111, NUR 112, NUR 211

Corequisites: ENG 111, PSY 241

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### NUR 211 Health Care Concepts

3 0 6 5

Prerequisites: NUR 111, NUR 112

Corequisites: BIO 169

This course is designed to further develop the concepts



within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### NUR 212 Health System Concepts

3 0 6 5

Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211

Corequisites: BIO 175, ENG 112

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### NUR 213 Complex Health Concepts

4 3 15 10

Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, and NUR 212

Corequisites: Humanities (3 hours)

This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

### NUR 214 Nursing Transition Concepts

3 0 3 4

Prerequisites: Admission to Advanced Placement Track

Corequisites: PSY 241, BIO 169

\*NUR 211, If student graduated from a non-concept-based curriculum

This course is designed to introduce concepts within the three domains of the individual, healthcare, and nursing as the LPN transitions to the ADN role. Emphasis is placed on the concepts within each domain including evidenced-based practice, quality improvement, communication, safety, interdisciplinary team, clinical decision-making, informatics, assessment, caring, and health-wellness-illness. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

## Nutrition

### NUT 110 Nutrition

3 0 0 3

Prerequisites: None

Corequisites: None

This course covers basic principles of nutrition and their relationship to human health. Topics include meeting nutritional needs of healthy people, menu modification based on special dietary needs, food habits, and contemporary problems associated with nutrition. Upon completion, students should be able to apply basic nutritional concepts as they relate to health and well-being. (\*VLC)

## Operations Management

### OMT 112 Materials Management

3 0 3

Prerequisites: None

Corequisites: None

This course covers the basic principles of materials management. Emphasis is placed on the planning, procurement, movement, and storage of materials. Upon completion, students should be able to demonstrate an understanding of the concepts and techniques related to materials management. *This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.* Competencies

Student Learning Outcomes

1. Identify appropriate strategies for procurement of materials.
2. Describe appropriate strategies for movement of materials.
3. Describe appropriate strategies for storage of materials.
4. Describe materials management planning.

### OMT 143 Just-In-Time

2 0 2

Prerequisites: None

Corequisites: None

This course is a study of the quality philosophy and Just-in-Time techniques designed to improve the ability to economically respond to change. Topics include production to demand with perfect quality, no unnecessary lead times, elimination of waste, developing productivity of people, and the quest for continuous improvement. Upon completion, students should be able to demonstrate an understanding of Just-in-Time methods and be prepared for the APICS CPIM examination.

### OMT 260 Issues in Operations Mgt.

3 0 3

Prerequisites: ISC 121, ISC 210, OMT 112, and ISC 130, ISC 131, ISC 132, or ISC 221

Corequisites: None

This course presents a variety of topics that highlight contemporary problems and issues related to operations management. Emphasis is placed on production and operations planning, environmental health and safety, materials management, and quality systems. Upon completion, students should be able to demonstrate the ability to make decisions and resolve problems in an operations management environment. *This course is a unique concentration requirement of the Operations Management concentration in the Business Administration program.* Competencies

Student Learning Outcomes

1. Identify contemporary problems and issues related to operations management.
2. Apply production and operations planning principles.
3. Identify environmental health and safety issues in operations management.
4. Discuss issues related to materials management.

## Office Systems Technology

### OST 080 Keyboarding Literacy

1 2 2

Prerequisites: None

Corequisites: None

This course is designed to develop elementary keyboarding skills. Emphasis is placed on mastery of the keyboard. Upon completion, students should be able to demonstrate basic proficiency in keyboarding.

### OST 122 Office Computations

2 2 3

Prerequisites: None

Corequisites: None

This course covers the keypad touch method using the electronic calculator (10-key) and mathematical functions used in office applications. Topics may include budgets, discounts, purchasing, inventory, and petty cash. Upon completion, students should be able to solve a wide variety of numerical problems commonly encountered in an office setting.

### OST 131 Keyboarding

1 2 2

Prerequisites: None

Corequisites: None

This course covers basic keyboarding skills. Emphasis is placed on the touch system, correct techniques, and development of speed and accuracy. Upon completion, students should be able to key at an acceptable speed and accuracy level using the touch system.

### OST 134 Text Entry & Formatting

2 2 3

Prerequisites: OST 131 or test out

Corequisites: None

This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents and key timed writings at speeds commensurate with employability. *This course is also available through the Virtual Learning Community (VLC).*

### OST 135 Adv Text Entry & Format

3 2 4

Prerequisites: OST 131, OST 134

Corequisites: None

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on the production of letters, manuscripts, business forms, tabulation, legal documents, and newsletters. Upon completion, students should be able to make independent decisions regarding planning, style, and method of presentation.

### OST 136 Word Processing

2 2 3

Prerequisites: None

Corequisites: None

This course introduces word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment. (\*VLC)

### OST 149 Medical Legal Issues

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

**OST-153 Office Finance Solutions**  
2 2 3  
Prerequisites: Take One: CIS-110, CIS-111 or OST-137  
Corequisites: None  
This course introduces basic bookkeeping concepts. Topics include entering data in accounts payable and receivable, keeping petty cash records, maintaining inventory, reconciling bank statements, running payroll, and generating simple financial reports. Upon completion, students should be able to demonstrate competence in the entry and manipulation of data to provide financial solutions for the office.

**OST 164 Office Editing**  
3 0 3  
Prerequisites: none  
Corequisites: None  
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text. (\*VLC)

**OST 184 Records Management**  
2 2 3  
Prerequisites: None  
Corequisites: None  
This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system. (\*VLC)

**OST 223 Admin. Office Transcription I**  
2 2 3  
Prerequisites: OST 164; and OST 134 or OST 136  
Corequisites: None  
This course covers the use of transcribing machines to produce mailable documents. Emphasis is placed on appropriate formatting, advanced text editing skills, and transcription techniques. Upon completion, students should be able to transcribe documents into mailable copy.

**OST 236 Adv Word/Inform. Processing**  
2 2 3  
Prerequisites: OST 135 or OST 136  
Corequisites: None  
This course develops proficiency in the utilization of advanced word/information processing functions. Topics include tables, graphics, macros, sorting, document assembly, merging, and newspaper and brochure columns. Upon completion, students should be able to produce a variety of complex business documents. *This course is also available through the Virtual Learning Community (VLC).*

**OST 241 Med Ofc Transcription I**  
1 2 2  
Prerequisite: Either MED 1221 or OST 141  
Corequisites: None  
This course introduces machine transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription, proofreading, and use of reference materials as well as vocabulary building. Upon completion, students should be able to prepare accurate and usable transcripts of voice recordings in the covered specialties.

**OST 242 Med Ofc Transcription II**

1 2 2  
Prerequisite: OST 241  
Corequisites: None  
This course continues building transcription techniques as applied to medical documents. Emphasis is placed on accurate transcription and text editing, efficient use of reference materials, increasing transcription speed and accuracy, and improving understanding of medical terminology. Upon completion, students should be able to display competency in accurately transcribing medical documents.

**OST 244 Med. Document Production**  
1 2 2  
Prerequisites: OST 134  
Corequisites: None  
This course provides production-level skill development in processing medical documents. Emphasis is placed on producing mailable documents through the use of medical-related materials. Upon completion, students should be able to perform competently in preparing accurate, correctly formatted, and usable documents.

**OST 247 Procedure Coding**  
2 2 3  
Prerequisites: MED 121 or OST 141  
Corequisites: None  
This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

**OST 248 Diagnostic Coding**  
2 2 3  
Prerequisites: MED 121 or OST 141  
Corequisites: None  
This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility.

**OST-249 Med Coding Certification Prep**  
2 3 3  
Prerequisites: Take All: OST-247 and OST-248  
Corequisites: None  
This course provides instruction that will prepare students to sit for a national coding certification exam. Topics include diagnostic and procedural coding. Upon completion, students should be able to sit for various medical coding certification exams.

**OST 250 Long-Term Care Coding**  
2 2 3  
Prerequisites: MED 121 or OST 141  
Corequisites: None  
This course covers diagnostic coding as it applies to long-term care facilities and home care. Topics include diagnostic coding and reimbursement in long-term care facilities and home care. Upon completion, students should be able to properly code conditions for long-term care and home care services.

**OST 286 Professional Development**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students

should be able to demonstrate these attributes in the classroom, office, and society.

**OST 289 Office Systems Management**  
2 2 3  
Prerequisites: OST 164 and either OST 134 or OST 136  
Corequisites: None  
This course provides a capstone course for the office professional. Topics include administrative office procedures, imaging, communication techniques, ergonomics, and equipment utilization. Upon completion, students should be able to function proficiently in a changing office environment.

## Process Control Instrumentation

**PCI 264 Process Control with PLC's**  
3 3 4

Prerequisites: None  
Corequisites: None  
This course introduces automatic process control implemented with PLC technology. Topics include interfacing and controlling advanced control loops and devices using various PLC-based systems. Upon completion, students should be able to demonstrate an understanding of advanced applications of process control and instrumentation systems with PLC-based devices.

## Physical Education

**PED 110 Fit and Well for Life**  
1 2 2

Prerequisites: None  
Corequisites: None  
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 111 Physical Fitness**  
0 3 1

Prerequisites: None  
Corequisites: None  
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 113 Aerobics I**  
0 3 1

Prerequisites: None  
Corequisites: None  
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise

Class/Lab/Credit or Class/Lab/Exp./Credit  
program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 117 Weight Training I**  
0 3 1

Prerequisites: None  
Corequisites: None  
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 120 Walking For Fitness**  
0 3 1

Prerequisites: None  
Corequisites: None  
This course introduces fitness through walking. Emphasis is placed on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 128 Golf-Beginning**  
0 2 1

Prerequisites: None  
Corequisites: None  
This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 130 Tennis-Beginning**  
0 2 1

Prerequisites: None  
Corequisites: None  
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 139 Bowling-Beginning**  
0 2 1

Prerequisites: None  
Corequisites: None  
This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 152 Swimming-Beginning**  
0 2 1

Prerequisites: None  
Corequisites: None  
This course is designed for non-swimmers and beginners. Emphasis is placed on developing confidence in the water, learning water safety, acquiring skills in floating, and learning elementary strokes. Upon completion, students should be able to demonstrate safety skills and be able to tread water, back float,

Class/Lab/Credit or Class/Lab/Exp./Credit  
and use the crawl stroke for 20 yards. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 155 Water Aerobics**  
0 3 1

Prerequisites: None  
Corequisites: None  
This course introduces rhythmic aerobic activities performed in water. Emphasis is placed on increasing cardiovascular fitness levels, muscular strength, muscular endurance, and flexibility. Upon completion, students should be able to participate in an individually-paced exercise program. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**PED 174 Wilderness Pursuits**  
0 2 1

Prerequisites: None  
Corequisites: None  
This course covers the skills necessary to prepare for and participate in a wilderness trip. Emphasis is placed on planning, preparing, and participating in a wilderness pack trip. Upon completion, students should be able to safely participate in overnight wilderness pack trips. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**PED 219 Disc Golf**  
0 2 1

Prerequisites: None  
Corequisites: None  
This course introduces the fundamentals of disc golf. Emphasis is placed on basic throwing techniques, putting, distance driving, scoring, and single and doubles play. Upon completion, students should be able to perform the skills required in playing situations. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

## Philosophy

**PHI 210 History of Philosophy**  
3 0 3

Prerequisites: ENG 111  
Corequisites: None  
This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**PHI 215 Philosophical Issues**  
3 0 3

Prerequisites: ENG 111  
Corequisites: None  
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critically evaluate the philosophical components of an issue.  
Competencies  
1. Engage in critical thinking.

Class/Lab/Credit or Class/Lab/Exp./Credit  
2. Identify, reconstruct, and evaluate philosophical arguments.  
3. Analyze key philosophical concepts within epistemology, metaphysics, and ethics.  
4. Demonstrate an understanding of major philosophical views, and how they relate to contemporary issues.. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

Competencies  
1. Engage in critical thinking about moral issues.  
2. Identify, reconstruct and evaluate ethical arguments.  
3. Analyze key ethical concepts.  
4. Demonstrate understanding of major views in moral philosophy and how they relate to contemporary ethical and social issues.

**PHI 240 Introduction to Ethics**  
3 0 3

Prerequisites: ENG 111  
Corequisites: None  
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral issues such as euthanasia, abortion, crime and punishment, and justice. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts. (\*VLC)*

Competencies  
1. Engage in critical thinking about moral issues.  
2. Identify, reconstruct and evaluate ethical arguments.  
3. Analyze key ethical concepts.  
4. Demonstrate understanding of major views in moral philosophy and how they relate to contemporary ethical and social issues.

## Photography

**PHO 110 Fund of Photography**  
3 6 5

Prerequisites: None  
Corequisites: None  
This course covers the basic technical aspects of photography, including camera controls, light and optics, flash, exposure, and processing. Emphasis is placed on principles of camera design and the relationship between subject and photographic image, with hands-on experience. Upon completion, students should be able to consistently produce technically excellent images.

**PHO 113 History of Photography**  
3 0 3

Prerequisites: None  
Corequisites: None  
This course introduces the history of photography from its inception through contemporary times. Emphasis is placed on technical and aesthetical developments in artistic and commercial photography. Upon completion, students should be able to identify significant photographers and procedures, trace the development of the medium, and discuss current trends in photography.

**PHO 115 Basic Studio Lighting**  
2 6 4

Prerequisites: PHO 110  
Corequisites: None  
This course covers the basic principles of studio light-



ing. Topics include basic lighting techniques and application of lighting ratios to product illustration/portraiture using tungsten/electronic strobe sources, with emphasis on equipment maintenance and safety. Upon completion, students should be able to select and set up the best lights and lighting applications for a wide variety of photographic subjects.

**PHO 120 Intermediate Photography**  
2 4 4

Prerequisites: PHO 110

Corequisites: None

This course expands the coverage of photographic materials and provides an opportunity to experiment. Emphasis is placed on additional techniques and processes, including solarization, multiple-imaging, infrared toning, and other non-traditional uses of photography. Upon completion, students should be able to demonstrate how the choice of technique enhances the photographic subject and influences content.

**PHO 132 Small-Format Photography**  
2 6 4

Prerequisite: PHO 110

Corequisites: None

This course introduces small-format cameras and their application in location portraiture, industrial photography, photojournalism, and multimedia photography and portable lighting equipment and techniques. Topics include rapid camera operation, location photography, exposure techniques, portable flash, process modification, filtration, and simple multimedia production. Upon completion, students should be able to produce professional quality images under a variety of adverse shooting conditions using the equipment and techniques studied.

**PHO 139 Intro to Digital Imaging**  
1 3 2

Prerequisites: None

Corequisites: None

This course introduces the conversion of photographs into digital images by exploring the effect hardware and software have on the reproduction process. Topics include basic imaging tools and vocabulary, calibration, density, contrast, and color. Upon completion, students should be able to demonstrate a basic understanding of the digital imaging process and be able to capture and output images.

**PHO 140 Digital Photo Imaging I**  
2 4 4

Prerequisites: PHO 110

Corequisites: None

This course introduces digital photo imaging exploring the use of hardware/software, image capture, input/output devices, ethics, and imaging aesthetics. Emphasis is placed on basic imaging tools and vocabulary of current digital imaging software, including selection tools, color correction, cloning, copy/paste, and filters. Upon completion, students should be able to capture images with a digital camera or scanner, manipulate and retouch the image, and select final image output.

**PHO 150 Portfolio Development I**  
3 3 4

Prerequisites: PHO 120 or PHO 130

Corequisites: None

This course provides an opportunity to develop a thematically related portfolio of photographic images that are consistent in print quality. Emphasis is placed

on subject/content development, choice of materials, and archival processing controls; organizing and sequencing images; editing; print finishing; and portfolio presentation. Upon completion, students should be able to edit and exhibit a consistent body of photographic prints in a portfolio presentation.

**PHO 180 Creative Problem Solving**  
1 4 3

Prerequisites: PHO 110

Corequisites: None

This course encourages the development of innovative photographic solutions to instructor-assigned tasks. Emphasis is placed on identifying components necessary to complete the task and applying creative solutions. Upon completion, students should be able to solve problems in a variety of photographic areas, combining media where needed to achieve the desired results.

**PHO 216 Documentary Photography**  
2 4 4

Prerequisites: PHO 110

Corequisites: None

This course introduces the practical, historical, and contemporary applications of documentary photography. Emphasis is placed on understanding the various approaches to creating a photographic documentary and how a documentary project can affect society. Upon completion, students should be able to produce a documentary project on a topic of interest to them.

**PHO 217 Photojournalism I**  
1 6 4

Prerequisites: PHO 110

Corequisites: None

This course covers logistics and techniques used in current professional newspaper photography. Topics include detailed study of spot and general news, sports, and feature photography along with basic newspaper layout, advanced photographic techniques, and legal issues. Upon completion, students should be able to demonstrate an understanding of basic aspects of news, sports, and feature photography.

**PHO 220 Business of Photography**  
3 0 3

Prerequisites: None

Corequisites: None

This course covers the business practices of photography with emphasis on freelance photography. Topics include copyright, payment fees, client relations, licenses, insurance, assignments, stock sales, and usage rates. Upon completion, students should be able to demonstrate an understanding of the photographic business, including billing, clients, copyright protection, and obtaining assignments.

**PHO 222 Video Production**  
2 2 3

Prerequisite: None

Corequisites: None

This course combines photography, light, movement, sound, music, and other elements to produce a video medium that can be informative, entertaining, and productive. Topics include video utilization, techniques and styles, pre-production scripting and planning, camera techniques, lighting, directing talent, and editing techniques. Upon completion, students should be able to create effective video productions, operate video camera equipment, and edit raw source tape to a final product.

**PHO 224 Multimedia Production**  
2 3 3

Prerequisite: None

Corequisites: None

This course covers various aspects of computer based multimedia production. Topics include sound recording and editing techniques and software, multimedia software, control of image and continuity and pacing, script writing, copyright laws and ethics. Upon completion, students should be able to use computer hardware and software for multimedia production.

**PHO 226 Portraiture**  
3 3 4

Prerequisites: PHO 115

Corequisites: None

This course covers the techniques of contemporary studio and location portraiture. Topics include lighting techniques, lighting ratios, available light to multiple light setups, posing techniques, and styles of glamour, fashion, corporate, and public relations portraiture. Upon completion, students should be able to choose the appropriate lighting, accessories, and posing style to produce a successful portrait.

**PHO 235 Commercial Photography**  
2 4 4

Prerequisites: PHO 115

Corequisites: None

This course covers the techniques of advertising photography used in the print media. Emphasis is placed on the conception, lighting, and creation of photographic illustration used for food, fashion, and product photography. Upon completion, students should be able to produce advertising photographs for professional photographic illustration.

## Physics

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.*

**PHY 110 Conceptual Physics**  
3 0 3

Prerequisites: None

Corequisites: None

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

**PHY 110A Conceptual Physics Lab**  
0 2 1

Prerequisites: None

Corequisites: PHY 110

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. *College Transfer: This course has been approved for transfer under*

the CAA and ICAA as a general education course in Natural Science.

### PHY 131 Physics-Mechanics

3 2 4

Prerequisites: MAT 121 or 171

Corequisites: None

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

### PHY 151 College Physics I

3 2 4

Prerequisites: MAT 171

Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

### PHY 152 College Physics II

3 2 4

Prerequisites: PHY 151

Corequisites: None

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

### PHY 251 General Physics I

3 3 4

Prerequisites: MAT 271

Corequisites: MAT 272

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

### PHY 252 General Physics II

3 3 4

Prerequisites: MAT 272 and PHY 251

Corequisites: None

This course uses calculus-based mathematical

models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.*

## Plastics

### PLA 110 Introduction to Plastics

2 0 2

Prerequisites: None

Corequisites: None

This course introduces the plastics processing industry, including thermoplastics and thermosets. Emphasis is placed on the description, classification, and properties of common plastics and processes and current trends in the industry. Upon completion, students should be able to describe the differences between thermoplastics and thermosets and recognize the basics of the different plastic processes.

## Political Science

### POL 120 American Government

3 0 3

Prerequisites: None

Corequisites: None

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

### POL 130 State & Local Government

3 0 3

Prerequisites: None

Corequisites: None

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

### POL 210 Comparative Government

3 0 3

Prerequisites: None

Corequisites: None

This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. *This course has been approved to satisfy the*

*Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## Psychology

### PSY 118 Interpersonal Psychology

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

### PSY 150 General Psychology

3 0 3

Prerequisites: None

Corequisites: None

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. (\*VLC)*

### PSY 239 Psychology of Personality

3 0 3

Prerequisites: PSY 150

Corequisites: None

This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

### PSY 241 Developmental Psych

3 0 3

Prerequisites: PSY 150

Corequisites: None

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. (\*VLC)*

### PSY 244 Child Development I

3 0 3

Prerequisites: None

Corequisites: None

This course provides an introduction to the study of child development and examines the growth and development of children from conception through early childhood. Topics include historical and theoretical perspectives, terminology, research and observation techniques as well as physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of the early stages of child development.

**PSY 245 Child Development II**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course examines the growth and development of children during early and middle childhood. Emphasis is placed on factors influencing physical, cognitive, and psychosocial growth and change. Upon completion, students should be able to demonstrate an understanding of early and middle child development.

**PSY 281 Abnormal Psychology**  
3 0 3  
Prerequisites: PSY 150  
Corequisites: None  
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

## Reading

*Initial student placement in developmental courses is based on individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by that college's placement test.*

**RED 090 Improved College Reading**  
3 2 4  
Prerequisites: RED 080 or ENG 085  
Corequisites: None  
This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; and drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. *This course satisfies the developmental reading prerequisite for ENG 111 or ENG 111A.*

**RED 091 Fast Track Imprv Coll Rdg**  
1 0 1  
Prerequisites: RED 080 or ENG 085  
Corequisites: None  
This course provides an intensive review of selected RED 090-level reading strategies. Topics include the following reading strategies at the RED 090 level: critical thinking, major question types, main idea, patterns of organization, vocabulary, and inference. Upon completion, students should be able to apply selected RED 090 reading strategies to various texts.

## Refrigeration

**REF 116 Commercial Systems I**  
2 6 4  
Prerequisites: AHR 115  
Corequisites: None  
This course introduces and compares various commercial refrigeration systems. Topics include service, repair, and diagnostic procedures for commercial systems and components, as well as evacuation, charging, startup, and evaluation. Upon completion, students

should be able to use appropriate tools, instruments, and procedures to service and install basic refrigeration systems or components.

**REF 117 Refrigeration Controls**  
2 6 4  
Prerequisites: AHR 111 or ELC 111  
Corequisites: None  
This course covers the design, operation, function, and schematics of basic control systems used in the refrigeration industry. Topics include proper control application, selection, and use of test instruments; simple control wiring; and the use of schematics as a troubleshooting tool. Upon completion, students should be able to identify, diagnose, and repair electrical and mechanical malfunctioning components.

**REF 123 Electrical Devices**  
2 6 4  
Prerequisites: AHR 111 or ELC 111  
Corequisites: None  
This course introduces the electrical and electronic components and test instruments commonly found in commercial refrigeration. Emphasis is placed on troubleshooting electrical and electronic devices, including motors, starting devices, switches, transformers, programmable controls, defrost controls, thermostats, and wiring systems. Upon completion, students should be able to use test equipment appropriately and safely to troubleshoot, test, and repair electrical devices.

## Religion

**REL 110 World Religions**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 211 Intro to Old Testament**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**REL 212 Intro to New Testament**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testam-

ent literature. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

## Information Systems Security

**SEC 110 Security Concepts**  
2 2 3  
Prerequisites: None  
Corequisites: None  
This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

**SEC 160 Security Administration I**  
2 2 3  
Prerequisites: None  
Corequisites: None  
This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses.

**SEC 260 Security Administration II**  
2 2 3  
Prerequisites: None  
Corequisites: None  
This course provides the skills necessary to design and implement information security controls. Topics include advanced networking and TCP/IP concepts, network vulnerability analysis, and monitoring. Upon completion, students should be able to distinguish between normal and anomalous network traffic, identify common network attack patterns, and implement security solutions.

## Sociology

**SOC 210 Introduction to Sociology**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. (\*VLC)*

**SOC 213 Sociology of the Family**  
3 0 3  
Prerequisites: None  
Corequisites: None  
This course covers the institution of the family and other intimate relationships. Emphasis is placed on



mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences. (\*VLC)*

**SOC 220 Social Problems**

3 0 3

Prerequisites: None

Corequisites: None

This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.*

**SOC 242 Sociology of Deviance**

3 0 3

Prerequisites: None

Corequisites: None

This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control, and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance. *This course has been approved to satisfy the Comprehensive Articulation Agreement pre-major and/or elective course requirement.*

**Spanish****SPA 110 Introduction to Spanish**

2 0 2

Prerequisites: None

Corequisites: None

This course provides an introduction to understanding, speaking, reading, and writing Spanish. Emphasis is placed on pronunciation, parts of speech, communicative phrases, culture, and skills for language acquisition. Upon completion, students should be able to identify and apply basic grammar concepts, display cultural awareness, and communicate in simple phrases in Spanish.

**SPA 111 Elementary Spanish I**

3 0 3

Prerequisites: None

Corequisites: None

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 112 Elementary Spanish II**

3 0 3

Prerequisites: SPA 111

Corequisites: None

This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 181 Spanish Lab 1**

0 2 1

Prerequisites: None

Corequisites: None

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**SPA 182 Spanish Lab 2**

0 2 1

Prerequisites: Take SPA-111

Corequisites: None

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate cultural awareness. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**SPA 211 Intermediate Spanish I**

3 0 3

Prerequisites: SPA 112

Corequisites: None

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present and future. *This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in humanities/fine arts.*

**SPA 212 Intermediate Spanish II**

3 0 3

Prerequisites: SPA 211

Corequisites: None

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing

complexity and sophistication. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.*

**SPA 281 Spanish Lab 3**

0 2 1

Prerequisites: Take SPA 182

Corequisites: None

This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**SPA 282 Spanish Lab 4**

0 2 1

Prerequisites: Take SPA 281

Corequisites: None

This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. *College Transfer: This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.*

**Transportation****TRN 111 Chassis Maint./Light Repair**

2 6 4

Prerequisite: None

Corequisites: None

This course covers maintenance and light repair of transportation suspension, steering, and brake systems. Topics include general servicing and inspection procedures of steering and suspension systems, wheels and tires, and drum and disc brakes including hydraulic and power-assist units. Upon completion, students should be able to perform maintenance and light repair of transportation suspension, steering, and brake systems.

**TRN 112 Powertrain Maint./Light Repair**

2 6 4

Prerequisite: None

Corequisites: None

This course covers maintenance and light repair of transportation engines, automatic and manual transmission/transaxles, engine performance systems, and HVAC systems. Topics include general servicing and inspection procedures of engines, engine lubrication and cooling systems, automatic and manual transmission/transaxles, HVAC components, and fuel, air induction, and exhaust systems. Upon completion, students should be able to perform maintenance and light repair of transportation engines, automatic and manual transmission/transaxles, engine performance systems, and HVAC systems.

**TRN 120 Basic Transportation Electricity**



Prerequisite: None

Corequisites: None

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

Competencies

·Student Learning Outcomes

1. Demonstrate work place safety related to transportation electrical systems.
2. Interpret and apply wiring diagram information on a transportation vehicle electrical system.
3. Demonstrate the proper use of electrical diagnostic test equipment.
4. Use Ohm's law to calculate the value of any of the following given the values of the remaining variables:  
\* Voltage (V)  
\* Resistance (R)  
\* Amperage (A)
5. Given a transportation vehicle with a fault in the battery, starting, and charging system, students will be able to perform successful diagnosis and repairs.
6. Demonstrate the ability to obtain appropriate service information on electrical circuit construction.

#### TRN 140      Transportation Climate Control

1 2 2

Prerequisite: None

Corequisites: None

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.

Competencies

·Student Learning Outcomes

1. In a lab setting, demonstrate work place safety per OSHA and EPA guidelines that apply to relevant climate control systems found on transportation vehicles and equipment.
2. Given a transportation vehicle or related equipment with a fault to the climate control system, diagnose and repair the climate control system using the recommended lab equipment as outlined by the related service information.
3. Using the recommended equipment as outlined by the EPA, identify and perform the proper recovery and recycling procedures for any refrigerant in a transportation vehicle or related equipment.
4. Describe the operation of the heating, ventilation and air condition systems.
5. Describe the use of climate control testing equipment to aid diagnosis of the systems.
6. Describe the use of appropriate service information and capacity charts.
7. Describe the EPA regulations that govern the proper use of refrigerants in a transportation vehicle or related equipment.

#### TRN 140A      Transp Climate Control Lab

1 2 2

Prerequisite: None

Corequisites: TRN 140

This course provides experiences for enhancing

student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

Competencies

·Student Learning Outcomes

1. Given a transportation vehicle or related equipment with a fault in the A/C system, diagnose and repair the system using the recommended lab equipment and service information.
2. Utilize proper equipment to identify a given A/C refrigerant type and the purity of the A/C refrigerant for the transportation industry.
3. Given a transportation vehicle or equipment with an A/C system, determine the recommended refrigerant oil and capacity levels as prescribed from related service information.
4. Given a transportation vehicle or equipment with an A/C system, use the recommended equipment to properly reclaim, recycle, evacuate and recharge the entire refrigerant system.
5. Given a Heating Ventilation and Air Conditioning (HVAC) system, properly drain, flush and refill the entire anti-freeze coolant system.
6. Given a Heating Ventilation and Air Conditioning (HVAC) system, evaluate the anti-freeze coolant condition and perform a systems test as recommended by service information for a transportation vehicle or equipment.
7. Diagnose and repair a transportation vehicle or equipment with a fault in a protection device for the given A/C system.
8. Given an A/C system, remove and inspect system components and seals for damage which may cause the system to leak refrigerant.
9. Given a faulty climate control system, diagnose temperature control problems.

#### TRN 170      PC Skills for Transp

1 2 2

Prerequisite: None

Corequisites: None

This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

Competencies

- 1. Given a transportation vehicle or equipment, identify it and locate relevant service information from one or more industry-standard databases.
- 2. Given a transportation vehicle or equipment, analyze and diagnose transportation on board diagnostic management systems using handheld and/or PC based diagnostic equipment.
- 3. Describe and perform basic PC skills used by transportation technicians.
- 4. Demonstrate the proper use of application software such as MS Word.

#### TRN 180 Basic Welding for Transp

1 4 3

Prerequisite: None

Corequisites: None

This course covers the terms and procedures for welding various metals used in the transportation industry with an emphasis on personal safety and environmental health. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, cutting processes and other related issues. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standard

Competencies

Student Learning Outcomes

- 1. Describe and list the proper fundamentals, processes and equipment, materials and metallurgy associated with welding of similar and dissimilar metals in transportation systems and equipment.
- 2. Identify and describe safety and health practices associated with the welding of similar and dissimilar metals in transportation systems and equipment.
- 3. In a lab setting, demonstrate the ability to successfully weld similar and dissimilar metals in transportation systems and equipment.
- 4. Select and list the proper inspection methods associated with the welding of similar and dissimilar metals in transportation systems and equipment.
- 5. In a lab setting, demonstrate proper setup and operational procedures associated with the welding of similar and dissimilar metals in transportation systems and equipment.
- 6. Describe and list the cutting techniques used with the various tools and methods associated with transportation systems and equipment.

## Web Technologies

#### WEB 110      Internet/Web Fundamentals

2 2 3

Prerequisites: None

Corequisites: None

This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand-coded website created with mark-up language, and effectively use and understand the function of search engines.

#### WEB 111      Intro to Web Graphics

2 2 3

Prerequisites: None

Corequisites: None

This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery.

#### WEB 115      Web Markup and Scripting

2 2 3

Prerequisites: None

Corequisites: None

This course introduces Worldwide Web Consortium (W3C) standard client-side Internet programming using industry-established practices. Topics include JavaScript, markup elements, stylesheets, validation,

accessibility, standards, and browsers. Upon completion, students should be able to develop hand-coded web pages using current markup standards.

### WEB 120 Intro Internet Multimedia

2 2 3

Prerequisites: None

Corequisites: None

This is the first of two courses covering the creation of internet multimedia. Topics include internet multimedia file types, file type conversion, acquisition of digital audio/video, streaming audio/video and graphics animation plug-in programs and other related topics. Upon completion, students should be able to create internet multimedia presentations utilizing a variety of methods and applications.

### WEB 140 Web Development Tools

2 2 3

Prerequisites: None

Corequisites: None

This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets.

### WEB 151 Mobile Application Development

2 2 3

Prerequisites: None

Corequisites: None

This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems, and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices.

### WEB 179 JAVA Web Programming

2 3 3

Prerequisite: None

Corequisites: None

This course introduces the development of dynamic, database-driven web applications using the JAVA programming languages. Topics include Object Oriented Programming JAVA Server Pages, servlets, database interactions, and form handling. Upon completion, students should be able to create and modify JAVA-based internet applications.

### WEB 182 PHP Programming

2 2 3

Prerequisite: None

Corequisites: None

This course introduces students to the server-side, HTML-embedded scripting language PHP. Emphasis is placed on programming techniques required to create dynamic web pages using PHP scripting language features. Upon completion, students should be able to design, code, test, debug, and create a dynamic web site using the PHP scripting language.

### WEB 210 Web Design

2 2 3

Prerequisites: None

Corequisites: None

This course introduces intermediate to advanced web design techniques. Topics include customer expectations, advanced markup language, multimedia technologies, usability and accessibility practices,

and techniques for the evaluation of web design. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web sites. (\*VLC)

### WEB 214 Social Media

2 2 3

Prerequisites: None

Corequisites: None

This course introduces students to social media for organizations. Topics include social media, marketing strategy, brand presence, blogging, social media analytics and technical writing. Upon completion, students should be able to utilize popular social media platforms as part of a marketing strategy, and work with social media analytics tools.

### WEB 225 Content Management Sys

2 2 3

Prerequisite: None

Corequisites: None

This course introduces students to Content Management Systems (CMS) designed for the publication of Web content to Web sites. Topics include individual user accounts, administration menus, RSS-feeds, customizable layout, flexible account privileges, logging, blogging systems, creating online forums, and modules. Upon completion, students should be able to register and maintain individual user accounts and create a business website and/or an interactive community website.

### WEB 230 Implementing Web Serv

2 2 3

Prerequisites: NET 110 or NET 125

Corequisites: None

This course covers website and web server architecture. Topics include installation, configuration, administration, and security of web servers, services and sites. Upon completion, students should be able to effectively manage the web services deployment lifecycle according to industry standards. (\*VLC)

### WEB 250 Database Driven Websites

2 2 3

Prerequisites: None

Corequisites: None

This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards.

### WEB 285 Emerging Web Technologies

2 2 3

Prerequisites: None

Corequisites: None

This course will explore, discuss, and research emerging technologies in the web arena. Emphasis is placed on exposure to up-and-coming technologies relating to the web, providing hands-on experience, and discussion of practical implications of these emerging fields. Upon completion, students should be able to articulate issues relating to these technologies.

### WEB 287 Web E-Portfolio

1 2 2

Prerequisites: None

Corequisites: None

This course covers the creation and organization of a web-based e-portfolio that includes a resume, references, and comprehensive academic and work samples. Emphasis is placed on creating an e-portfolio with solid design and demonstrable content, the production of a resume and self-promotional materials, and interview techniques. Upon completion, students should be able to present their own domain with included professional e-portfolio elements of resume, sample work, and related self-promotional materials.

## Welding

### WLD 110 Cutting Processes

1 3 2

Prerequisite: None

Corequisites: None

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

#### Competencies

#### Student Learning Outcomes

1. Identify the parts and functions of an oxy-acetylene cutting torch.
2. Identify the parts and functions of various cutting equipment.
3. List the safety practices of using oxy-fuel, plasma-arc, and other cutting equipment.
4. Set-up and adjust cutting equipment.
5. Use an oxy-acetylene outfit, plasma cutting equipment, and other equipment to: a. Cut a straight marked line on various thickness steel plate. b. Cut various shapes out of carbon steel plate. c. Cut carbon steel plate to a bevel and pipe.

### WLD 112 Basic Welding Processes

1 3 2

Prerequisites: None

Corequisites: None

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes. Students will be given the opportunity to construct metal sculpture, or jewelry and other art metal objects using basic welding processes.

### WLD 115 SMAW (Stick) Plate

2 9 5

Prerequisite: None

Corequisites: None

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

#### Competencies

#### Student Learning Outcomes

1. Demonstrate SMAW electrode classification in compliance with AWS codes.
2. Perform a groove weld according to AWS D1.1.
3. Demonstrate safe and proper SMAW equipment setup, operation, and shut-down practices in accordance to manufacturer's recommendations.

**WLD 116 SMAW (Stick) Plate/Pipe**  
1 9 4

Prerequisites: WLD 115

Corequisites: None

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

**WLD 121 GMAW (MIG) FCAW/Plate**  
2 6 4

Prerequisite: None

Corequisites: None

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions

Competencies

Student Learning Outcomes

1. Demonstrate the use of GMAW electrode classification in compliance with AWS code for the selection of electrodes.
2. Demonstrate the use of FCAW electrode classification in compliance with AWS code for the selection of electrodes.
3. Perform a Fillet weld in accordance with AWS code.
4. Perform a groove weld in accordance with AWS code.
5. Demonstrate safe and proper GMAW equipment setup, operation, and shut-down practices in accordance to manufacturer's recommendations.

**WLD 131 GTAW (TIG) Plate**  
2 6 4

Prerequisite: None

Corequisites: None

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

Competencies

•Student Learning Outcomes

- 1. Demonstrate the use of GTAW electrode classification in compliance with AWS for the selection of electrodes.
- 2. Perform a groove weld in accordance with AWS code.
- 3. Perform a Fillet weld in accordance with AWS code.
- 4. Demonstrate safe equipment setup, operation, and shut-down practices according to manufacturer's recommendations.

**WLD 141 Symbols & Specifications**  
2 2 3

Prerequisite: None

Corequisites: None

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

Competencies

•Student Learning Outcomes

- 1. Identify and read welding symbols.
- 2. Identify and explain various lines, notes, and specifications on a blueprint.
- 3. Identify the different types of lines on a blueprint.
- 4. Interpret destructive testing symbols and their methods.
- 5. Interpret non-destructive testing symbols and their methods.
- 6. Develop a working sketch.
- 7. Create a bill of materials from a blueprint.

**WLD 143 Welding Metallurgy**  
1 2 2

Prerequisites: None

Corequisites: None

This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

**WLD 151 Fabrication I**  
2 6 4

Prerequisites: None

Corequisites: None

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

**WLD 261 Certification Practices**  
1 3 2

Prerequisites: WLD 115, WLD 121, and WLD 131

Corequisites: None

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes. Students will be given an opportunity to qualify for at least one of our MTCC welder certifications.

**Work-Based Learning****WBL 111 Work-Based Learning I**  
0 10 1

Prerequisite: None

Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 112 Work-Based Learning I**  
0 20 2

Prerequisite: None

Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should

be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 113 Work-Based Learning I**  
0 30 2

Prerequisite: None

Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 114 Work-Based Learning I**  
0 40 4

Prerequisite: None

Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 120 Career Readi/Explore/Employ**  
2 3 3

Prerequisite: None

Corequisites: None

This course is designed to familiarize individuals with fundamental skill sets that are critical for successful employment including locating and using workplace information, conveying professionalism, communicating effectively, promoting teamwork, thinking critically, and providing individuals with career exploration experiences. Topics include career readiness credential preparation, career exploration, and employability skillsets. Upon completion, students should be able to demonstrate the ability to locate and use information, interpret graphic information, apply mathematics to work-related situations, use key employability skills, and match education with careers in business and industry.

**WBL 121 Work-Based Learning II**  
0 10 1

Prerequisite: None

Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 122 Work-Based Learning II**  
0 20 2

Prerequisite: None

Corequisites: None

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

Class/Lab/Credit or Class/Lab/Exp./Credit  
**WBL 123      Work-Based Learning II**  
 0    30    3  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 124      Work-Based Learning II**  
 0    40    4  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 131      Work-Based Learning III**  
 0    10    1  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 132      Work-Based Learning III**  
 0    20    2  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 133      Work-Based Learning III**  
 0    30    3  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 134      Work-Based Learning III**  
 0    40    4  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

Class/Lab/Credit or Class/Lab/Exp./Credit  
**WBL 211      Work-Based Learning IV**  
 0    10    1  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 212      Work-Based Learning IV**  
 0    20    2  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 213      Work-Based Learning IV**  
 0    30    3  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

**WBL 214      Work-Based Learning IV**  
 0    40    4  
 Prerequisite:    None  
 Corequisites:    None  
 This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

Class/Lab/Credit or Class/Lab/Exp./Credit



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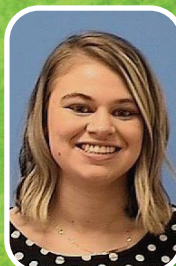
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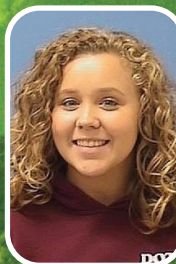
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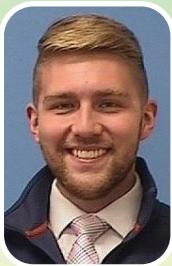
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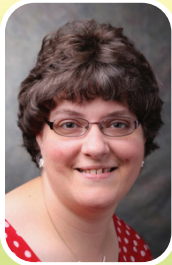
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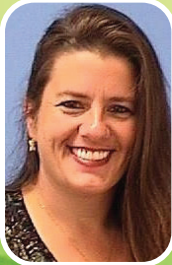
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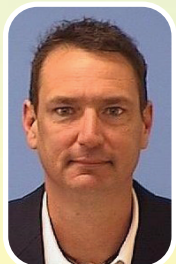




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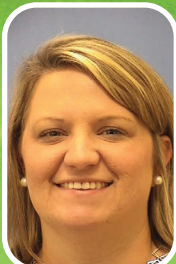
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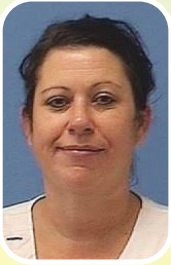




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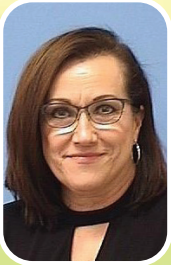
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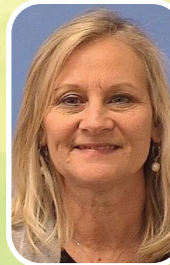
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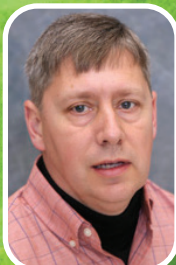
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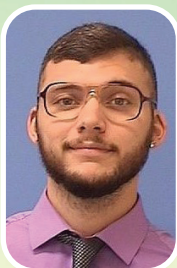


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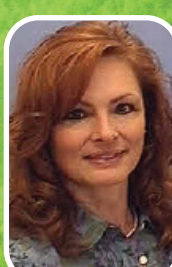
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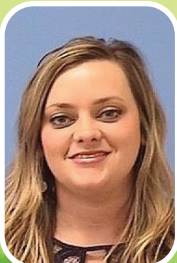
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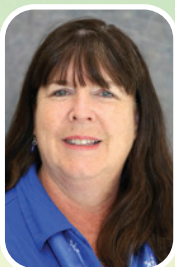


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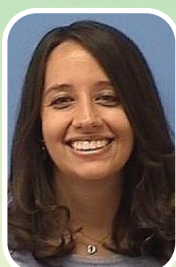


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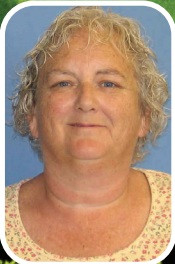
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