

## Learning for Life

# Catalog and Student Handbook 2022-2023

## McDowell Technical Community College

54 College Drive Marion, NC 28752 (828) 652-6021 Fax (828) 652-1014 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
Robert Ayers	June 30, 2023
Ray McKesson	June 30, 2024
Gary Stroud, Chair	June 30, 2025
Susan English	June 30, 2026
Appointees of the McDowell County Board of Education	
Donald Ramsey	June 30, 2023
Gwen Conley	June 30, 2024
Kay P. Medford	June 30, 2025
Nancy Hunter (Vice-Chair)	June 30, 2026
Appointees of the McDowell County Commissioners	
Bill Bach	June 30, 2023
Chad Marsh	June 30, 2024
William Kehler	June 30, 2025
Brenda Vaughn	June 30, 2026

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
Associate Vice-President of Workforce Development	Stacy Buff
Dean of Curriculum Programs	Valerie Dobson
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 and MTCC Board Liaison, at 828-652-0630.

## Members of the Foundation are:

Paula Avery (West Marion Community Forum) Walt Bagwell (Bagwell Insurance Agency), Chair Marion Baker (Retired) Bob Boyette (City of Marion) Marsh Dark (Morrow Insurance) Johnnie Davis (Crane Resistoflex) Jan Goodson (Retired) 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), Vice-Chair Sarah Washburn Rachel Withrow (Crooked Door Coffee House)

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)
Madalyn Gaito (Director of Development and MTCC Board Liaison)
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.

		2022-2023 Telephone List			
		Main Campus Number: (828)-652-6	021		
Dr. Brian S. Merritt, President	652-0635	Dr. Penny Cross, VP	652-0645	Ryan Garrison, VP	652-0627
Stacy Buff, Associate VP	652-0663	Valerie Dobson, Dean	652-0699	Dr. Beverly Watts, Dean	652-0669
Brandon Hensley, Associate Dean	652-0641	Dr. Bo Bennett, Associate Dean	659-0488		
Abernathy, Eric	652-0679	Forshey, Tony	659-0494	Nur Asst Info Line (CNA)	652-0639
Adcock, Tab	659-0492	Foster, Belinda	652-0611	Padgett, Julie	652-0631
ARC Lab. Bldg. 11	659-0408	Gaito, Madalyn	652-0630	Pearson, Rachel	652-0658
Arrowood, Chelsie	652-0637	GED Testing Room	652-0683	Pell Grant Info Line	659-0450
Arrowood, Sam	652-0686	Getty, Richard	652-0694	Perry, Jay	652-0670
Assoc. Degree Nursing -Foothills Nursing Cons.	652-0661	Goble-Talley, Anna		Price, Pam #131	659-6001
Auto Mechanics		Gouge, Jane	-	Print Shop	652-0665
Bailey, Aprille	-	Gowan, Sherry	652-0661	Prison	659-7810
Bartlett, Lora Dr.	_	Grindstaff, Susan		Reeves, Gwen	652-0678
Berthelson, Hannah	652-0602	·	-	Robinson, Lisa (MEC Principal)	659-0415
Boardroom Bldg. 17		Harmon, Ladelle (Bo)		Ruiz, Betsy	652-0621
Bolick, Kendall		Harris, Madison	-	Sain, Pamela	659-0451
Book Store		Health Sciences	-	Sanchez Campanor, Areli	652-0696
Book Store Office		Hensley, Jill		Saxton, Chris	659-0456
Bowling, Chuck		Hensley, Jimmy #140	-	Security Cell	442-1084
Brooks, Dalton	_	Hollifield, Randy		Security Office	652-0673
Buchanan, Darian	_	Huffman, Revonda (Jill)		Shuford, Eddie	652-0652
Buchanan, Karen		Hughes, Joni		Silver, Rebecca	659-0449
Buff, Tabitha	659-0465	0 /		Silver, Sharon	652-0609
Burnette, Bridget		Hyatt, Marc	659-0484	*	659-0485
Business Office		Ingle, Terri (MEC Counselor)		Small Business Center	652-0634
Butler, Rachael		Jamison, Howard		Smith, Jamie	659-0439
Butner, Judy		Johnson, E. Brooke		Smith, Nicole	659-0428
Byrd, Lisa	652-0624	Jones, Susanna	652-0659	Smith, Sara (MAI Counselor)	659-0417
Café	652-0615	Jordan, Marilyn	652-0648	Snyder, Angela	659-0472
Career & College Promise		Jornigan, Sarah		Snyder, Cortney	652-0610
Champ, Thomas		King, Edwin #160		Steele, Rhonda	652-0654
Classroom 14 & 15 Area		Laughridge, Tina		Stines, Wayne	652-0693
Children's Services Network		Lavender, Michael		Student Enrichment Center	659-0467
Cline, Billy Dr. (MAI Principal)		Ledford, Abigail		Tate, Jonathan	659-0490
Cole, Crystal College & Career Readiness #137	659-6001	Libow, Vershell		Teacher Resource Area Telemedicine	659-0424 652-0639
Cosmetology Lobby		Long, Susan		Tipton, Donnie	659-0407
Cosmetology Office		Lytle, Elizabeth		Tipton, Sharon	652-0625
Cross, Chip		Machine Shop		Truett, Lorrie	652-0623
Crowder, Emilee		Macopson, Elmer		Universal Adv. Manuf. Center	652-0619
Culp, Jennifer	652-0650	MAI/MEC School Resource Officer	659-0460	UAMC Adjunct Office	659-0436
Curtis, Colton	652-0690	Maintenance	659-0406	Valentino, Jorge	659-0404
Davis, Vonda #155	659-6001	Madden, Blake	652-0682	Valentino, Teresa	652-0634
Day Care Baby Room		McClelland, Terri (Lab 628)		Wacaster, Penny #137	659-6001
Day Care Kitchen		McCraw, Donnie		Wakefield, Diana	652-0643
Day Care Office		McCraw, Sandi		Walsh, Terrance (Ed)	652-0643
DeAngelus, Ramona		McFarland, Kelly Giles		Ward, Claudia	652-0664
Dillard, John Dowdle, Clay		MEC Socretary		Warpoole, Lydia Watson, Debbie	659-0489
Duncan, Annie	_	MEC Secretary Mechatronics		Watson, Debbie Waycaster, Brooke	659-0423 659-0499
Edwards, Eugene		Minish, Wesley		Weather, (Students)	659-0499
Edwards, Lisa	_	Monosso, Deb		Weiler, Joan	652-0651
Electrical		Moore, Alan	652-0677	-	652-0689
Eller, Elizabert (Liz)		Moore, Terry		Whisnant, Allison	659-0452
Engineering		Moran, Lori	659-0453	Wilson, Breanna	652-0618
Esthetics Adjunct Office	659-0455	Morgan, Andy	652-0655	Wilson, Dakota	652-0638
Esthetics Lobby		Morgan, Lisa		Wimsatt, Sherry	652-0653
FAX Bldg. 17		Morgan, Myra	_	Wood, Ashlee	652-0612
FAX Bldg. 18		Morgan, Ronald		Wood, Wanda	652-0668
FAX Business Office		Morris, William		Woods, Eleanor	652-0698
FAX NC Works		Mullis, Austin		Wright, Diane	652-0660
FAX NC Works FAX Student Service		Nail Tech Adjunct Office  NC Works	659-0452 659-6001		
I AA STUUCHT SELVICE	033-0430	INC ANDLES	1000-6001		

## Academic Calendar

## Fall 2022

All FT Faculty Return August 1 Faculty/Staff Development August 9 Late Registration August 10 **New Student Orientation** August 11 Classes Begin August 15 **Labor Day Holiday** September 5 Fall Break (Work/Annual Leave) October 10-11 Fall Festival October 20 **Spring Registration Begins** November 1 Work/Annual Leave November 23 **Thanksgiving Holiday** November 24-25 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 December 28-30 Campus Closed Mandatory Annual Leave

## Spring 2023

Return to Campus January 2 Last Day to Register January 4 **New Student Orientation** January 5 Classes Begin January 9 End of Drop/Add January 11 **Martin Luther King Holiday** January 16 Tuition Refund Deadline/10% January 19 Last Day to receive Non-Punitive Grade of "W" February 10 MTCC Fire Rescue College March 16-19 Advising for Summer Fall Semesters begins March 27 **Spring Break** April 3-6 **Good Friday Holiday** April 7 Registration for Summer/Fall Semesters April 10 Spring Fling SGA Event April 13 **End of Spring Term** May 8 Final Grades due May 9 Graduation May 12

## **Summer 2023**

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Last Date to Register	iviay 15
New Student Orientation	May 16
Classes Begin	May 17

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End of Drop/Add May 22
Tuition Refund Deadline/10% May 23
Memorial Day Holiday May 29
Last Day to receive Non-Punitive Grade of "W" June 7
Independence Day Holiday July 4

Summer Break July 3 and July 5-6

End of Eight Week Classes

End of Summer Term

August 2

Final Grades due

August 3

## Fall 2023

Full-time Faculty Return August 1 Faculty/Staff Development August 9 Last Day to Register August 14 **New Student Orientation** August 15 Classes Begin August 16 End of Drop/Add August 18 Tuition Refund Deadline/10% August 25 **Labor Day Holiday** September 4 Last Day to receive Non-Punitive Grade of "W" September 19 Virtual Option Days October 9-10 Fall Festival SGA Event October 19 **Spring Registration** November 1 Work/Annual Leave November 22 November 23-24 **Thanksgiving Holidays** End of Fall Term December 11 Final Grades due December 12

Campus Closed-Mandatory Leave December 27-29

December 13-15, 18-19

December 20-22, 25, 26

Work/Annual Leave

**Campus Closed-Holidays** 

## 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

## MTCC History

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 handicapped 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 Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award associate degrees. Questions about the accreditation of McDowell Technical Community College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033.

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. Demonstrate quantitative competencies.
- 4. Demonstrate skills in using a personal computer.
- 5. 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 evening 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 1:00 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 Communications 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 .

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 <a href="https://www.mcdowelltech.edu">www.mcdowelltech.edu</a> 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	<u>Television</u>
WWNC (570 AM) Asheville	WLOS (Ch. 13, Asheville)
WBRM (1250 AM) Marion	WBTV (Channel 3, Charlotte)
WTOE (1470 AM) Spruce Pine	WSOC (Ch. 9, Charlotte) WYFF (Ch. 4, Greenville)
WMNC (92.1 FM) Morganton	WSPA (Ch. 7, Spartanburg)
WKSF (99.9 FM) Asheville	
WONO (104.3 FM), Asheville/Old Fort	

*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 Academics 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.

## Campus Access Parking and Security Fee (CAPS)

Parking facilities are available for students, visitors, staff and faculty. All Curriculum students are required to pay a \$20.00 per semester CAPS fee. CAPS fee receipts are utilized for student parking, campus security costs, including but not limited to, salaries, related benefits and operating costs associated with security personnel; contracted security services; vehicles, equipment and capital improvements necessary to secure college property.

## 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 at the library entrances. 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 9,000 volumes of current reference materials, college transfer, technical and vocational materials. Approximately 18 periodicals and 1 newspaper 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 NCLIVE Databases: Gale and Cinahl Plus. 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 account to get the passwords/urls for the databases. A library account is needed by all library patrons to use the computers in the library and to check out library materials.

## 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/MAI faculty & staff and the community. The center also houses a Pre-K classroom which is led by a NC certified licensed teacher. The Pre-K classroom hours are 8:30-2:30 during the school year and is free to qualifying families. A wrap-around service (2:30-5:30) is available for children enrolled in the Pre-K classroom. The Child Development Center is open from 7:30 am to 5:30 pm Monday through Friday. Financial assistance is available to qualifying applicants. For additional information, fee schedules and application materials, please contact the 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.

## Tobacco Use

McDowell Technical Community College is a tobacco-free campus (including cigarettes, chewing tobacco and e-

cigarettes). Smoking/tobacco use is not permitted on campus. Those who violate this policy will receive a verbal warning for the first offense. Continued violation of this policy will result in disciplinary action. If you would like assistance with smoking cessation, please contact QuitlineNC at 1-800-QUIT-NOW or 1-800-784-8669. It is a free call.

## Bulletin Boards

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

## 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.

# **Performance Measures and Standards for Performance Funding**Last revised July 2022 from the 2022 Performance Measures for Student Success report by NCCCS. McDowell Technical Community College

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

		D	C4 11(-)	
Ž	Measure	Description	Standard(s)	MILC. Performance
Ą.	Basic Skills Student Progress	Index score based on the percentage of Basic Skills Periods of Participation (PoP) with at least one Measurable Skill Gain (MSG).	Excellence Level: 1.348 Baseline: 0.283	0.912
Ä		Index score based on the percentage of first-time fall Associate Degree seeking and transfer pathway students passing a credit-bearing English course with a "C" or better within three years.	Excellence Level: 1.147 Baseline: 0.747	1.147
ರ	C. College-Level Math Success	Index score based on the percentage of first-time fall Associate Degree seeking and transfer pathway students passing a credit-bearing Math course with a "C" or better within three years.	Excellence Level: 1.192 Baseline: 0.662	0.890
D.	D. First Year Progression	Index score based on the percentage of first-time fall credential-seeking curriculum students graduated prior to or enrolled in postsecondary education the subsequent fall semester.	Excellence Level: 1.065 Baseline: 0.870	1.013
표	Curriculum Completion	Index score based on the percentage of first-time fall credential-seeking curriculum students who graduate, transfer, or are enrolled during the fourth academic year with 42 successfully completed non-developmental hours.	Excellence Level: 1.094 Baseline: 0.853	0.972
τ.	Licensure and Certification Passing Rate	Index score based on the percentage of first-time test-takers passing licensure and certification exams within each exam. Exams included in this measure are state mandated exams which candidates must pass before becoming active practitioners.	Excellence Level: 1.024 Baseline: 0.809	BLET *  Cosmetology *  Esthetics *  Pract. Nursing 1.02  Nurse Aide 1.00  Reg. Nursing 1.06  EMT-B *  EMT-A *  EMT-A *
ؿ	G. College Transfer Performance	Index score based on the percentage of community college students (Associate Degree completers and those who have completed 30 or more articulated transfer credits) transferring at a four-year university or college during the fall semester who remain enrolled at any four-year university or college the subsequent fall semester or graduate prior to.	Excellence Level: 1.024 Baseline: 0.923	0.945

# College Summary:

One performance measure Met or Exceeded Excellence Level, Three performance measures were Within Average Band, and Three performance measures were Below Average Band, Above Baseline Level.

## Degrees, Diplomas & Certificates

Program Name	Program Code	CIP Code
Accounting		
Accounting		
Accounting-Associate Degree	A25800A	52.0304
Accounting-Certificate	C25800A	52.0304
Accounting-Certificate/Pathway	C25800AP	52.0304
Accounting and Finance		
Accounting/Finance-Associate Degree	A25800B	52.0304
Accounting/Finance-Certificate	C25800E	52.0304
Accounting-Income Tax Preparation	C35000C	52.0204
Accounting Income Tax Preparer-Certificate	C25800C	52.0304
Accounting-Other Accounts Payable, Accounts Receivable, Bookkeeping-Certificate	C25800B	52.0304
Payroll Accounting Clerk-Certificate	C25800D	52.0304
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Advertising and Graphic Design		
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
Air Conditioning, Heating & Refrigeration Technology		
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 Level I	C35100A	47.0201
Air Conditioning, Heating & Refrigeration Technology-Certificate Level II	C35100B	47.0201
Applied Engineering Technology		
Applied Engineering Technology	A40120	15 0001
Applied Engineering Technology- Associate Degree Applied Engineering Technology-Diploma	A40130 D40130	15.0001 15.0001
Applied Engineering Technology-Certificate Level I	C40130A	15.0001
Applied Engineering Technology-Certificate Level II	C40130B	15.0001
Applied Engineering Technology-Certificate/Pathway	C40130P	15.0001
Basic Law Enforcement Training		
Basic Law Enforcement Training-Certificate	C55120	43.0107
Business Administration		
Business Administration	A25420D	F2 0204
Business Administration-Associate Degree Business Administration-Certificate/Pathway	A25120B C25120P	52.0201 52.0201
Business Administration-Marketing & Retail	C23120P	32.0201
Business Administration - Marketing & Retailing-Associate Degree	A25120M	52.0201
Business Administration - Marketing & Retailing-Certificate/Pathway	C25120FP	52.0201
Business Administration-Operations Management		
Business Administration - Operations Management-Associate Degree	A251200	52.0201
Business Administration - Operations Management Certificate	C251200	52.0201
Business Administration - Operations Management Certificate/Pathway	C25120OP	52.0201
College Transfer		
Associate in Arts	A10100	24.0101
Associate in Arts in Tagghar Proposition	P1012C	24.0101
Associate in Arts in Teacher Preparation	A1010T	24.0101
Associate in Science in Teacher Preparation Associate in Science	A1040T A10400	24.0101 24.0101
Associate in Science Associate in Science-Certificate/Pathway	P1042C	24.0101
Associate in Science-Certificate/ Fathway  Associate in Engineering	A10500	14.0101
Associate in Engineering-Certificate/Pathway	P1052C	14.0102
Associate in General Education Nursing	A1030N	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
Early Childhood Administration	055050	
Early Childhood Administration Certificate	C55850	13.1210
Infant/Toddler Care	655200	42.4240
Infant/Toddler Care-Certificate	C55290	13.1210
Infant/Toddler Care-Certificate/Pathway	C55290P	
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 46.0302
Electrical Systems Technology-Certificate Level I Electrical Systems Technology-Certificate Level II	C35130A	46.0302
Electrical systems recimology-certificate level if	C35130B	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	CEE 4COC	42.0202
Emergency Management Criminal Justice-Certificate  Emergency Management Criminal Justice Certificate (Pathway)	C55460C C55460CP	43.0302 43.0302
Emergency Management-Criminal Justice-Certificate/Pathway	C33400CP	45.0302
Emergency Management-Fire Protection Emergency Management-Fire Protection-Certificate/Pathway	C55460FP	43.0302
Emergency Management-Fire Protection-Certificate/Pathway  Emergency Management-Fire Technology-Certificate	C55460F	43.0302
Emergency Medical Science		
Emergency Medical Science – Associate Degree	A45340A	51.0904
Emergency Medical Science – Associate Degree  Emergency Medical Science – Paramedic Bridge Program	A45340A A45340BR	51.0904
Emergency Medical Science – Certificate	C45340	51.0904
Emergency Medical Science – Certificate/Pathway	C45340P	51.0904
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Esthetics Technology-Certificate	C55230	12.0409
Esthetics Technology-Certificate/Pathway	C55230P	12.0409
Esthetics Technology Instructor-Certificate	C55270	12.0413
General Education		
	440000	24.0400
General Education-Associate Degree	A10300	24.0199
General Occupational Technology		
General Occupational Technology-Associate Degree	A55280	24.0102
Healthcare Management Technology		
Healthcare Management Technology-Associate Degree	A25200M	51.0705
Healthcare Management Technology – Long-Term Care-Associate Degree	A25200W	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	C 13300E1	31.0707
	C45360IF	F1 0707
Health Information Technology-Health Care Informatics-Certificate		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		
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Information Systems	C25590R	11 0103
Information Systems Information Systems Advanced	C25590B	11.0103
Information Systems Information Systems Advanced Information Systems	C25590A	11.0103
Information Systems Information Systems Advanced Information Systems Information Systems	C25590A A25590	11.0103 11.0103
Information Systems Information Systems Advanced Information Systems Information Systems Information Systems	C25590A A25590 C25590AP	11.0103 11.0103 11.0103
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Information Systems Information Systems Advanced Information Systems Information Systems Information Systems Information Systems Information Systems Information Systems - Advanced (Information Systems)  Software and Web Development Software & Web Design Advanced Software and Web Development Software & Web Development Software & Web Development Advanced (Software and Web Development)  Web Administration Web Administration Web Admin & Design Web Administration and Design) Web Administration and Design) Web Administration & Design Advanced Web Administration & Design  Manicuring/Nail Technology Manicuring/Nail Technology-Certificate  Mechatronics Engineering Technology Mechatronics Engineering Technology-Diploma Mechatronics Engineering Technology-Certificate Level I	C25590A A25590 C25590AP C25590BP A25590A  C25590FP C25590EP C25590E C25590F A25590C  C25590GP C25590H A25590D C25590H C25590G C25590H C25590G	11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103
Information Systems Information Systems Advanced Information Systems - Advanced (Information Systems)  Software and Web Development Software & Web Design Advanced Software and Web Development Software & Web Development Advanced (Software and Web Development)  Web Administration Web Administration Web Administration Web Administration and Design) Web Administration & Design Advanced (Web Administration & Design Advanced Web Administration & Design Posign Advanced Web Administration & Design Advanced Web Administration & Design Advanced Web Administration & Design  Manicuring/Nail Technology Manicuring/Nail Technology Mechatronics Engineering Technology-Associate Degree Mechatronics Engineering Technology-Certificate Level I Mechatronics Engineering Technology-Certificate Level II	C25590A A25590 C25590AP C25590BP A25590A  C25590FP C25590EP C25590E C25590F A25590C  C25590GP C25590HP A25590D C25590H C25590G C25590H C25590G	11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103
Information Systems Information Systems Advanced Information Systems Information Systems Information Systems Information Systems Information Systems Information Systems - Advanced (Information Systems)  Software and Web Development Software & Web Design Advanced Software and Web Development Software & Web Development Software & Web Development Advanced (Software and Web Development)  Web Administration Web Administration Web Admin & Design Web Administration and Design) Web Administration and Design) Web Administration & Design Advanced Web Administration & Design  Manicuring/Nail Technology Manicuring/Nail Technology-Certificate  Mechatronics Engineering Technology Mechatronics Engineering Technology-Diploma Mechatronics Engineering Technology-Certificate Level I	C25590A A25590 C25590AP C25590BP A25590A  C25590FP C25590EP C25590E C25590F A25590C  C25590GP C25590H A25590D C25590H C25590G C25590H C25590G	11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103 11.0103

Nursing		
Associate Degree Nursing		
Associate Degree Nursing	A45110	51.3801
Practical Nursing		
Practical Nursing-Diploma	D45660	51.3901
Nurse Aide		
Nurse Aide-Diploma	D45970	51.3902
Nurse Aide-Certificate	C45840	51.3902
Nurse Aide-Certificate/Pathway	C45840P	51.3902
Office Administration		
General Office Administration		
General Office Administration-Associate Degree	A25370A	52.0204
General Office Administration-Diploma	D25370A	52.0204
General Office Administration-Certificate	C25370A	52.0204
Office Administration-Certificate/Pathway	C25370P	52.0204
Office Administration-Other		
Office Finance-Associate Degree	A25370B	52.0204
Office Software-Associate Degree	A25370C	52.0204
Photographic Technology		
Photographic Technology-Associate Degree	A30280	10.0201
Photography Technology-Certificate	C30280	10.0201
Photographic Technology-Certificate/Pathway	C30280P	10.0201
Transportation		
Transportation: Automotive Systems Technology		
Automotive Systems Technology-Associate Degree	A60160	47.0604
Automotive Systems Technology-Diploma	D60160	47.0604
Automotive Systems Technology-Certificate Level I	C60160A	47.0604
Automotive Systems Technology-Certificate Level II	C60160B	47.0604
Automotive Systems Technology-Certificate/Pathway	C60160P	47.0604
Welding Technology		
Welding Technology-Associate Degree	A50420	48.0508
Welding Technology-Associate Degree  Welding Technology-Diploma	D50420	48.0508
Welding Technology-Certificate Level I	C50420A	48.0508
Welding Technology-Certificate Level II	C50420B	48.0508
Welding Technology-Certificate/Pathway	C50420P	48.0508
Adult High Cabaal		
Adult High School	Adult High School Diploma	
Adult High School Equivalency (GED)	Adult High School Equivalency Certificate	
Continuing Education Course Completion	Certificate of course completion	

## 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.

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.

College transcripts may be required, depending on a student's program of study and/or whether they are receiving Veteran Education Benefits. Select financial aid students may also be required to provide transcripts on a case-by-case basis. Processing times vary for each school.

## 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.

## 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 prinicipal 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 prinicipal 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

## Advanced Placement

## **Advanced Placement (AP)**

Advanced Placement (AP) is a program of college preparatory courses for high school students administered by The College Board, an educational nonprofit organization. Standardized AP exams are used to assess student mastery of course content. Students receive scores on a "1" to "5" scale, with "5" being the highest. McDowell Tech will accept scores of a "3" or higher on the approved list below.

In order to receive college credit, all official scores must be sent to: MTCC 54 College Dr. Marion, NC 28752

AP Examinations	Score Required	Hours Granted	College Course Credited
Art History	3	3	ART 111
American History	3	6	HIS 131 & HIS 132
American Politics	3	3	POL 120
Biology	3	4	BIO 111
Biology	5	8	BIO 111 & BIO 112
Calculus AB	3	4	MAT 271
Calculus BC	3	8	MAT 271 & MAT 272
Chemistry	3	4	CHM 151
Chemistry	4	8	CHM 151 & CHM 152
Computer Science A	3	3	CIS 115
English Language & Composition	3	3	ENG 111
English Literature & Composition	3	3	ENG 241
Macroeconomics	3	3	ECO 252
Microeconomics	3	3	ECO 251
Music Listening/Literature (older version)	3	3	MUS 110
Physics 1	3	4	PHY 151
Physics 2	3	4	PHY 152
Physics B	3	8	PHY 151 & PHY 152
Physics C: Electricity & Magnetism	3	4	PHY 252
Physics C: Mechanics	3	4	PHY 251
Psychology	3	3	PSY 150
Spanish Language & Culture (or Language, older version)	3	4	SPA 111/181
Spanish Language & Culture (or Language, older version)	4	8	SPA 112/182 & 211/281
Spanish Language & Culture (or Language, older version)	5	8	SPA 211/281 & 212/282
Statistics	3	4	MAT 152

Unites States Government & Politics	3	3	POL 120
Unites States History	3	6	HIS 131 & HIS 132
World History	3	8	HIS 111 & HIS 112

## 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 Curriculums

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 Pathways**

Eleventh and twelfth grade College Transfer Pathway students must:

Be a high school junior or senior; AND

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.).

Tenth grade College Transfer Pathway students must:

Be in the second semester of tenth grade; AND

Be Identified as gifted in English/Reading AND Math OR

Have approved Aptitude AND Achievement Test scores of 92%-99%; AND

Have verification of maturity by high school principal and AIG Coordinator; AND

Have written consent of the student's parent/guardian.

## Career & Technical Education (CTE) Pathways

Eleventh and twelfth grade CTE Pathway students must:

Be a high school junior or senior; AND

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.) OR

Have a Letter of Recommendation from the high school principal or designee.

Tenth grade CTE pathway students must:

Be in the second semester of tenth grade; AND

Have the recommendation of principal/designee and rationale for recommendation; AND

Have assed Math I with grade of C or better; AND

Have scored 3, 4 or 5 on EOC for Math I; AND

Have scored 3, 4 or 5 on 8th grade EOC ELA assessment.

## Workforce Continuing Education (WCEP) Pathways

Be a high school junior or senior; AND

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.) OR

Have a Letter of Recommendation from the high school principal or designee.

To maintain eligibility in a pathway, a student must maintain a college GPA of at least 2.0 after 6 credit hours and must continue to make progress toward high school graduation. A student who falls below a 2.0 GPA after completing 6 credit hours will be required to meet with a College Liaison to develop a "Satisfactory Academic Progress" plan.

CCP Pathway options for the 2022-2023 academic year are outlined on the following pages.

More information can be found on the CCP webpage at www.mcdowelltech.edu/CCP.



2022-2023



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/

For enrollment information contact

# Emilee Crowder at 828.659.0427

eccrowder72@go.mcdowelltech.edu

# Lydia Warpoole at 828.659.0427

lwarpoole69@go.mcdowelltech.edu

## **College Transfer Pathways**

Associate in	Arts P1012C	<b>Credit Hours</b>
ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disci	
COM 120	(Pick 1 course)	.s. 7
COM 120 COM 231	Interpersonal Communication Public Speaking	s 3 3
COM 231	r ablic 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	3 courses from 2 different disci	olines)
ECO 251	Principles of Microeconomics	
ECO 252	Principles of Macroeconomics	
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 1 course)	
MAT 143	Quantitative Literacy	3
MAT 152	Statistical Methods I	4
MAT 171	Precalculus Algebra	4
	Trecated tas 7 ligeora	
	(Pick 1 course)	
BIO 111	General Biology I	4
CHM 151	General Chemistry I	4
	(Other required)	
ACA 122	College Transfer Success	1
Total credit hou		1
**SPA 111/181 and S	PA 112/182 are accessible in this pathwa	V

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

Associate ii	n Engineering P1052C					
ENG 111	Writing and Inquiry	3	Associate i	in Science	P1042C	
ENG 112	Writing/Research in the Disciplines	3				
			ENG 111	Writing a	and Inquiry	3
	(Pick 1 course)		ENG 112	Writing/F	Research in the Disciplines	3
ART 111	Art Appreciation	3				
COM 120	Interpersonal Communications	3		(Pick	(1 course)	
COM 231	Public Speaking	3	COM 120	•	onal Communications	3
ENG 231	American Literature I	3	COM 231	Public Sp		3
ENG 232	American Literature II	3				
ENG 241	British Literature I	3		(Pick	(1 course)	
ENG 242	British Literature II	3	ART 111	Art Appre	•	3
MUS 110	Music Appreciation	3	DRA 111		Appreciation	3
			ENG 231		1 Literature l	
	(Take 1 course)					3
ECO 251	Princ of Microeconomics	3	ENG 232		n Literature II	3
		_	ENG 241		iterature l	3
	(Take 2 courses)		ENG 242		iterature II	3
MAT 271	Calculus I	4	MUS 110	Music Ap	preciation	3
MAT 272	Calculus II	4		_		
MAI ZIZ	Catcutus II	•	,		n 2 different disciplines)	
	(Pick 2 courses)		ECO 251	•	s of Microeconomics	3
CHM 151	General Chemistry I	4	ECO 252	•	s of Macroeconomics	3
PHY 251	General Physics I	4	HIS 111	World Ci	vilizations I	3
PHY 252	General Physics II	4	HIS 112	World Ci	vilizations II	3
PHT 232	General Physics II	4	HIS 131	Americar	n History I	3
	(Take 2 courses)		HIS 132	Americar	n History II	3
EGR 150	Intro to Engineering	2	POL 120	Americar	n Government	3
			PSY 150	General	Psychology	3
DFT 170	Engineering Graphics	3	SOC 210		tion to Sociology	3
	(Other required)					
ACA 122	(Other required) College Transfer Success	1		(Pick	2 courses)	
Total credit h		1	MAT 171	Precalcu	lus Algebra	4
	d SPA 112/182 are accessible in this pathway		MAT 172	Precalcu	lus Trigonometry	4
317(111)101 di	a 517(112) 102 are accessible in this pathway		MAT 271	Calculus	I	4
Associate N	lursing P1032C		MAT 272	Calculus	II	4
ENG 111	Writing and Inquiry	3				
ENG 112	Writing/Research in the Disciplines	3		(Pick 1 sequ	uence of courses)	
2110 112	Withing/Research in the Disciplines	3	BIO 111	General	Bio I &	
	(Pick 1 course)		BIO 112	General	Bio II	8
ART 111	Art Appreciation	3	CHM 151	Gen. Che		
MUS 110	Music Appreciation	3	CHM 152	Gen. Che		8
14103 110	Music Appreciation	J	CHITISE	oen. ene		Ü
	(Take 2 courses)			(Othe	er required)	
PSY 150	General Psychology	3	ACA 122	•	Fransfer Success	1
PSY 241	Developmental Psychology	3	Total credit h	•	Transfer Success	
131271	Developmental rayenology	3	iotat credit i	iouis. 55		
	(Take 2 courses)		**SPA 111/181 a	and SPA 112/182 are	e accessible in this pathway	
BIO 168	Anatomy and Physiology I	4	,	,	, , , , , , , , , , , , , , , , , , , ,	
BIO 169	Anatomy and Physiology II	4				
	(Other required)					
ACA 122	College Transfer Success	1	All Calla	ogo Transf	for Courses are UCET	r <i>c</i>
Total credit h				•	er Courses are UGET	
	Foreign Language Not available in pathway	2	9 <b>except</b> A	ACA 122, [	OFT 170 and EGR 15	0

Associate in	Arts Teacher Preparation P101	<b>2T</b>	Associate in	Science Teacher Preparation P1042T	-
ENG 111	Writing and Inquiry	3	ENG 111	Writing and Inquiry	3
ENG 112	Writing/Research in the Disciplines	3	ENG 112	Writing/Research in the Disciplines	3
	(Pick 1 course)			(Pick 1 course)	
COM 120	Interpersonal Communications	3	COM 120	Interpersonal Communications	3
COM 231	Public Speaking	3	COM 231	Public Speaking	3
	-			(Pick 1 course)	
	(Pick 2 courses)		ART 111	Art Appreciation	3
ART 111	Art Appreciation	3	DRA 111	Theater Appreciation	3
DRA 111	Theater Appreciation	3	ENG 231	American Literature I	
ENG 231	American Literature I	3	ENG 232	American Literature II	3 3
ENG 232	American Literature II	3	ENG 241	British Literature I	3
ENG 241	British Literature I	3	ENG 242	British Literature II	3
ENG 242	British Literature II	3	MUS 110	Music Appreciation	3
MUS 110	Music Appreciation	3			
	• •		(Pick	1 courses from 2 different disciplines)	
(Pick 2	2 courses from 2 different disciplines)		ECO 251	Principles of Microeconomics	3
ECO 251	Principles of Microeconomics	3	ECO 252	Principles of Macroeconomics	3
ECO 252	Principles of Macroeconomics	3	HIS 111	World Civilizations I	3
HIS 111	World Civilizations I	3	HIS 112	World Civilizations II	3
HIS 111	World Civilizations II	3	HIS 131	American History I	3
			HIS 132	American History II	3
HIS 131	American History I	3	POL 120	American Government	3
HIS 132	American History II	3	PSY 150	General Psychology	3
POL 120	American Government	3	SOC 210	Introduction to Sociology	3
PSY 150	General Psychology	3			
SOC 210	Introduction to Sociology	3		(Pick 2 courses)	
			MAT 171	Precalculus Algebra	4
	(Must take at least 1 course)		MAT 172	Precalculus Trigonometry	4
MAT 143	Quantitative Literacy	3	MAT 271	Calculus I	4
MAT 152	Statistical Methods I	4	MAT 272	Calculus II	4
MAT 171	Precalculus Algebra	4			
				(Pick 1 sequence of courses)	
	(Pick 1 course)		BIO 111	General Bio I &	
BIO 111	General Biology I	4	BIO 112	General Bio II	8
CHM 151	General Chemistry I	4	CHM 151	Gen. Chem. I &	
0.11.131	central enemistry.	•	CHM 152	Gen. Chem. II	8
	(Take 3 courses)			(Take 3 courses)	
SOC 225	Social Diversity	3	SOC 225	Social Diversity	3
EDU 187	Teaching & Learning for All	4	EDU 187	Teaching & Learning for All	4
EDU 216	Foundations of Education	3	EDU 216	Foundations of Education	3
	(Other required)			(Other required)	
ACA 122	College Transfer Success	1	ACA 122	(Other required) College Transfer Success	1
Total credit ho		T	Total credit h	_	1
**SPA 111/181 and	SPA 112/182 are accessible in this pathway	30	**SPA 111/181 aı	nd SPA 112/182 are accessible in this pathway	

## **Career & Technical Education Pathways**

Career	Technical Education Patriwa	ys			
Accounting C2	5800AP Credit Hou	rs	Computer -Into	egrated Machining C50210P	
ACC 120	Principles of Financial Account	4	BPR 111	Print Reading	2
ACC 120 ACC 121	Principles of Managerial Accounting	4	MAC 141		4
		3			
BUS 110	Introduction to Business		MAC 142	Machine Applications II	4
CIS 110	Introduction to Computers	3	MAC 121	Intro to CNC	2
Total credit hou	urs: 14		Total credit ho	urs: 12	
Advertising and	d Graphic Design C30100P			SEE4.40D	
ART 121	Two- Dimensional Design	3	Cosmetology C		
ART 171	Digital Design 1	3	COS 111	Cosmetology Concepts I	4
ART 275	Introduction to Graphic Design	3 3 4	COS 112	Salon I	8
GRD 141	Graphic Design I	<i>J</i>	COS 113	Cosmetology Concepts II	4
GRD 141 GRD 151	Computer Design Basics	3	COS 114	Salon II	8
Total credit ho		3	COS 115	Cosmetology Concepts III	4
iotal credit noi	YL2: TO		COS 116	Salon III	4
Air Conditionin	g, Heating, & Ref. C35100P		COS 117	Cosmetology Concepts IV	2
AHR 110	Introduction to Refrigeration	5	Total credit ho	urs: 34	
AHR 111	HVACR Electricity	3			
AHR 112	Heating Technology	4	<b>COS: Esthetics</b>	Technology C55230P	
Total credit ho			COS 119	Esthetics Concepts I	2
iotat credit not	ai 5. 12		COS 120	Esthetics Salon I	
Applied Engine	ering Technologies C40130P		COS 125	Esthetics Concepts II	6 2
ATR 112	Introduction to Automation	3	COS 126	Esthetics Salon II	6
ELC 131	Circuit Analysis	4	Total credit ho		U
HYD 110	Hydraulics/Pneumatics I	3	iotat credit no	uis. 10	
MNT 110	Intro to Maintenance Procedures	2	Cybor Crimo To	chnology Basic Certificate C55210AP	
Total credit ho		2	CCT 110	Intro to Cyber Crime	Z
iotat credit no	A13. 12		CCT 110 CCT 112		) 7
Automotive Sys	stems Technology C60160P			Ethics & High Technology	3 3 3 3 3
AUT 113	Automotive Servicing 1	2	CIS 110	Introduction to Computers	2
TRN 111	Chassis Maint./Light Repair	2 4	CTS 120	Hardware/Software Support	5
TRN 112	Powertrain Maint./Light Repair	4	DBA 110	Database Concepts	5
TRN 170	PC Skills for Transportation	4 2	NET 125	Introduction to Networks	3
Total credit hou		_	Total credit ho	urs: 18	
iotat cicait no	NI 3. 12				
<b>Business Admir</b>	nistration C25120P			d Education C55220P	
BUS 110	Introduction to Business	3		Intro to Early Childhood Ed.	4
BUS 115	Business Law I	3	EDU 131	Child, Family, and Community	3
BUS 125	Personal Finance	3	EDU 145	Child Development II	3
BUS 137	Principles of Management	3	EDU 146	Child Guidance	3 3 3 3
CIS 110	Introduction to Computers	3	EDU 153	Health, Safety, & Nutrition	3
Total credit hou			Total credit ho	urs: 16	
<b>D</b> • • • • • •	M				
	n Marketing & Retailing C25120FP	7		d Infant Toddler C55290P	
BUS 110	Introduction to Business	3	EDU 119	Intro to Early Childhood Ed	4
BUS 115	Business Law I	3	EDU 131	Child, Family, and Community	3
CIS 110	Introduction to Computers	3	EDU 144	Child Development I	3 3 3
MKT 120	Principles of Marketing	3	EDU 153	Health, Safety, & Nutrition	3
MKT 227	Marketing Applications	3	EDU 234	Infants, Toddlers, and Twos	3
Total credit hor	urs: 15		Total credit ho	urs: 16	
Rusinass Admir	n.– Operations Management C251200P				
BUS 137	Principles of Management	z	Electrical Syste	ems Technology C35130P	
CIS 110	Introduction to Computers	3 3	ELC 113	Residential Wiring	4
		3 3	ELC 118	National Electrical Code	
ISC 121	Environmental Health & Safety	<i>J</i>	ELC 128	Introduction to PLC	2 3
ISC 130	Intro to Quality Control	3	ELC 115	Industrial Wiring	4
ISC 210	Oper. & Prod Planning	3 3	Total credit ho		
OST 136	Word Processing	5			
Total credit hou	NL2: TQ		31		

	ustice C55460CP		Information T	echnology C25590AP	
CJC 111	Intro to Criminal Justice	3 3 3 3	CIS 110		3
CJC 131	Criminal Law	3	CTS 120	Hardware/Software Support	3 3 3
CJC 132	Court Procedure & Evidence	3	NOS 130	Windows Single User	3
CJC 231	Constitutional Law	3	WEB 115	Web Markup and Scripting	3
ACA 115	Success & Study Skills	1	Total credit he		
Total credit ho	urs: 13				
				and Web Development C25590EP	
EM: Emergency	/ Management C55460EP		CSC 151	JAVA Programming	3
EPT 130	Mitigation & Preparedness	3	DBA 110	Database Concepts	3
EPT 140	Emergency Management	3	WEB 111	Intro to Web Graphics	3
EMS 110	EMT	9	WEB 115	Web Markup and Scripting	3
ACA 115	Success & Study Skills	1	Total credit he	ours: 12	
Total credit ho					
				n and Design C25590GP	7
	ology C55460FP		WEB 111	Intro to Web Graphics	3 3 3 3
FIP 120	Intro to Fire Protection	3	WEB 115		5
FIP 124	Fire Prevention & Public Ed	3 3	WEB 120	Intro to Internet Multimedia	5
FIP 132	Building Construction	3	WEB 214	Social Media	3
FIP 228	Local Govt Finance	3	Total credit he	ours: 12	
ACA 115	Success & Study Skills	1			
Total credit ho				Engineering Technology C40350P	-
			ATR 112	Intro to Automation	3 2 2 2
Emergency Me	dical Science C45340P		DFT 119	Basic Cad	2
EMS 110	EMT	9	EGR 125	Appl Software for Tech	2
MED 121	Medical Terminology I	3	EGR 150	Intro to Engineering	2
MED 121	Medical Terminology II	3	EIC 112	Intro to PLC	3
ACA 115	Success & Study Skills	3 3 1	Total Credits:	12	
Total credit ho		1			
iotat credit iio	uis. 10			tant C45840P	
Health Informa	tion Technology C45360P		NAS 101	Nursing Assistant I	6
CIS 111			NAS 102	Nursing Assistant II	6
		7	MED 434		7
	Basic PC Literacy	2	MED 121	Medical Terminology I	3
HIT 110	Intro to Health Care & HIM	2 3 7	MED 122	Medical Terminology II	3
HIT 110 HIT 112	Intro to Health Ćare & HIM Health Law Ethics	3 3		Medical Terminology II	3
HIT 110 HIT 112 HIT 114	Intro to Health Ćare & HIM Health Law Ethics Health Data Systems/Standards	3 3 3	MED 122 Total credit he	Medical Terminology II ours: 18	3
HIT 110 HIT 112 HIT 114 MED 121	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I	3 3 3 3	MED 122 Total credit he Office Admini	Medical Terminology II ours: 18 stration C25370P	3
HIT 110 HIT 112 HIT 114 MED 121 MED 122	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II	3 3 3	MED 122 Total credit he Office Admini CIS 110	Medical Terminology II ours: 18 stration C25370P Introduction to Computers	3 3
HIT 110 HIT 112 HIT 114 MED 121	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II	3 3 3 3	MED 122 Total credit ho Office Admini CIS 110 OST 136	Medical Terminology II ours: 18 stration C25370P Introduction to Computers Word Processing	3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit ho	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17	3 3 3 3	MED 122 Total credit ho Office Admini CIS 110 OST 136 OST 164	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps	3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit ho	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP	3 3 3 3	MED 122 Total credit ho Office Admini CIS 110 OST 136 OST 164 OST 184	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management	3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit how HIT: Medical B HIT 124	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II	3 3 3 3 3	MED 122 Total credit he Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289	Medical Terminology II ours: 18  stration C25370P Introduction to Computers Word Processing Text Editing Apps Records Management Office Admin. Capstone	3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hot HIT: Medical B HIT 124 HIT 215	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management	3 3 3 3 3 1 2	MED 122 Total credit ho Office Admini CIS 110 OST 136 OST 164 OST 184	Medical Terminology II ours: 18  stration C25370P Introduction to Computers Word Processing Text Editing Apps Records Management Office Admin. Capstone	3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor HIT: Medical B HIT 124 HIT 215 MED 121	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I	3 3 3 3 3 1 2 3	MED 122 Total credit he Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15	3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor HIT: Medical B HIT 124 HIT 215 MED 121 MED 121 MED 122	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II	3 3 3 3 3 1 2 3 3	MED 122 Total credit ho Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit ho Photographic	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P	3 3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit how HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding	3 3 3 3 3 1 2 3 3 3	MED 122 Total credit he Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he Photographic PHO 110	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P    Fundamentals of Photography	3 3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor HIT: Medical B HIT 124 HIT 215 MED 121 MED 121 MED 122 OST 247 OST 248	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding	3 3 3 3 3 1 2 3 3 3 3	MED 122 Total credit he Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he Photographic PHO 110 PHO 115	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P    Fundamentals of Photography    Basic Studio Lighting	3 3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit how HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding	3 3 3 3 3 1 2 3 3 3	MED 122 Total credit he Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he Photographic PHO 110 PHO 115 PHO 139	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P    Fundamentals of Photography    Basic Studio Lighting    Intro to Digital Imaging	3 3 3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor HIT: Medical B HIT 124 HIT 215 MED 121 MED 121 MED 122 OST 247 OST 248	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Med Coding Certification Prep	3 3 3 3 3 1 2 3 3 3 3	MED 122 Total credit he  Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P    Fundamentals of Photography    Basic Studio Lighting    Intro to Digital Imaging    Intermediate Photography	3 3 3 3 3 3 3 4
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor  HIT: Medical B HIT 124 HIT 215 MED 121 MED 121 MED 122 OST 247 OST 248 OST 249	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Med Coding Certification Prep	3 3 3 3 3 1 2 3 3 3 3	MED 122 Total credit he  Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115	Medical Terminology II  ours: 18  stration C25370P  Introduction to Computers Word Processing Text Editing Apps Records Management Office Admin. Capstone  ours: 15  Technology C30280P  Fundamentals of Photography Basic Studio Lighting Intro to Digital Imaging Intermediate Photography Success & Study Skills	3 3 3 3 3 3 3
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit how HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit how Healthcare Main	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Med Coding Certification Prepurs: 18  nagement Tech Receptionist C25200P	3 3 3 3 3 3 3 3 3 2	MED 122 Total credit he  Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120	Medical Terminology II  ours: 18  stration C25370P  Introduction to Computers Word Processing Text Editing Apps Records Management Office Admin. Capstone  ours: 15  Technology C30280P  Fundamentals of Photography Basic Studio Lighting Intro to Digital Imaging Intermediate Photography Success & Study Skills	3 3 3 3 3 3 3 4
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor HIT: Medical B HIT 124 HIT 215 MED 121 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit hor Healthcare Mai	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  Illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Diagnostic Coding Med Coding Certification Prepurs: 18  Inagement Tech Receptionist C25200P Leadership & Management Skills	3 3 3 3 3 3 3 3 3 3 3 3	MED 122 Total credit he  Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115 Total credit he	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P    Fundamentals of Photography    Basic Studio Lighting    Intro to Digital Imaging    Intermediate Photography    Success & Study Skills ours: 17	3 3 3 3 3 3 3 4
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor  HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit hor  Healthcare Mai BUS 253 HIT 114	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Diagnostic Coding Med Coding Certification Prepurs: 18  nagement Tech Receptionist C25200P Leadership & Management Skills Health Data Systems/Standards	3 3 3 3 3 3 3 3 3 3 3 3	MED 122 Total credit he  Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115 Total credit he  Welding Techn	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P    Fundamentals of Photography    Basic Studio Lighting    Intro to Digital Imaging    Intermediate Photography    Success & Study Skills ours: 17  mology C50420P	3 3 3 3 3 3 4 1
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor HIT: Medical B HIT 124 HIT 215 MED 121 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit hor Healthcare Mai	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Med Coding Certification Prepurs: 18  nagement Tech Receptionist C25200P Leadership & Management Skills Health Data Systems/Standards Intro to Healthcare Management	3 3 3 3 3 3 3 3 3 3 3 3	MED 122 Total credit he  Office Adminic CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115 Total credit he  Welding Technology	Medical Terminology II ours: 18  stration C25370P    Introduction to Computers    Word Processing    Text Editing Apps    Records Management    Office Admin. Capstone ours: 15  Technology C30280P    Fundamentals of Photography    Basic Studio Lighting    Intro to Digital Imaging    Intermediate Photography    Success & Study Skills ours: 17  nology C50420P    Cutting Processes	3 3 3 3 3 3 3 4 1
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor  HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit hor  Healthcare Mai BUS 253 HIT 114	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Diagnostic Coding Med Coding Certification Prepurs: 18  nagement Tech Receptionist C25200P Leadership & Management Skills Health Data Systems/Standards	3 3 3 3 3 3 3 3 3 3 3 3	MED 122 Total credit he  Office Admini CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115 Total credit he  Welding Tech WLD 110 WLD 115	Medical Terminology II  ours: 18  stration C25370P  Introduction to Computers Word Processing Text Editing Apps Records Management Office Admin. Capstone  ours: 15  Technology C30280P  Fundamentals of Photography Basic Studio Lighting Intro to Digital Imaging Intermediate Photography Success & Study Skills  ours: 17  nology C50420P  Cutting Processes SMAW (stick) Plate	3 3 3 3 3 3 3 4 1
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor  HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit hor  Healthcare Ma BUS 253 HIT 114 HMT 110	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Med Coding Certification Prepurs: 18  nagement Tech Receptionist C25200P Leadership & Management Skills Health Data Systems/Standards Intro to Healthcare Management	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	MED 122 Total credit he  Office Adminic CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115 Total credit he  Welding Technology WLD 110 WLD 115 WLD 131	Medical Terminology II ours: 18  stration C25370P     Introduction to Computers     Word Processing     Text Editing Apps     Records Management     Office Admin. Capstone ours: 15  Technology C30280P     Fundamentals of Photography     Basic Studio Lighting     Intro to Digital Imaging     Intermediate Photography     Success & Study Skills ours: 17  mology C50420P     Cutting Processes     SMAW (stick) Plate     GTAW (TIG) Plate	3 3 3 3 3 3 3 4 1
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit hor  HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit hor  Healthcare Mail BUS 253 HIT 114 HMT 110 MED 121	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II  urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Diagnostic Coding Med Coding Certification Prepurs: 18  nagement Tech Receptionist C25200P Leadership & Management Skills Health Data Systems/Standards Intro to Healthcare Management Medical Terminology I	3 3 3 3 3 3 3 3 3 3 3 3	MED 122 Total credit he  Office Adminic CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115 Total credit he  Welding Technology WLD 110 WLD 115 WLD 131 WLD 143	Medical Terminology II  ours: 18  stration C25370P     Introduction to Computers     Word Processing     Text Editing Apps     Records Management     Office Admin. Capstone  ours: 15  Technology C30280P     Fundamentals of Photography     Basic Studio Lighting     Intro to Digital Imaging     Intermediate Photography     Success & Study Skills  ours: 17  nology C50420P     Cutting Processes     SMAW (stick) Plate     GTAW (TIG) Plate     Welding Metallurgy	3 3 3 3 3 3 3 4 1
HIT 110 HIT 112 HIT 114 MED 121 MED 122 Total credit how HIT: Medical B HIT 124 HIT 215 MED 121 MED 122 OST 247 OST 248 OST 249 Total credit how Healthcare Mail BUS 253 HIT 114 HMT 110 MED 121 MED 121 MED 121 MED 122	Intro to Health Care & HIM Health Law Ethics Health Data Systems/Standards Medical Terminology I Medical Terminology II  urs: 17  illing and Coding C45360BP Prof Practice Exp II Revenue Cycle Management Medical Terminology I Medical Terminology II Procedure Coding Diagnostic Coding Med Coding Certification Prepurs: 18  magement Tech Receptionist C25200P Leadership & Management Skills Health Data Systems/Standards Intro to Healthcare Management Medical Terminology I Medical Terminology II Medical Legal Issues	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	MED 122 Total credit he  Office Adminic CIS 110 OST 136 OST 164 OST 184 OST 289 Total credit he  Photographic PHO 110 PHO 115 PHO 139 PHO 120 ACA 115 Total credit he  Welding Technology WLD 110 WLD 115 WLD 131	Medical Terminology II  ours: 18  stration C25370P     Introduction to Computers     Word Processing     Text Editing Apps     Records Management     Office Admin. Capstone  ours: 15  Technology C30280P     Fundamentals of Photography     Basic Studio Lighting     Intro to Digital Imaging     Intermediate Photography     Success & Study Skills  ours: 17  nology C50420P     Cutting Processes     SMAW (stick) Plate     GTAW (TIG) Plate     Welding Metallurgy	3 3 3 3 3 3 3 4 1

## Academic Regulations

## Grading System

Final grades will be issued to all students at the end of the term, based on the criteria outlined below (with the exceptions given).

At the end of each semester, quality points are assigned in accordance with the following formula. (The minimum grade-point average for graduation is 2.00 or an average of grade "C.")

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 quality points.

Numerical Grade	Letter Grade	Quality Point Equivalent
90-100	A-Excellent	4 points per credit hour
80-89	B-Above Average	3 points per credit hour
70-79	C-Average	2 points per credit hour
60-69	D-Below Average	1 point per credit hour
Below 60	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 Developme	ental	No effect on grade point average
RD-Repeat Develop	mental	No effect on grade point average
W-Withdrawal prior	r to 30% point	No effect on grade point average
WP-Withdrawal Pas	ssing after 30% point	No effect on grade point average
WF-Withdrawal Fai	ling after 30% point	0 grade point (punitive)
No Withdrawals allo	owed after 75% point	

<sup>\*\*</sup> The above Numerical Grade does not apply to the Cosmetology and Esthetics Programs. Please see individual program handbooks for program requirements.

## 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.

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

## ASSOCIATE DEGREE PROGRAMS

<b>Cumulative Semester Hours</b>	Minimum Grade Point Average
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**

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

<sup>\*\*</sup>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 at 828-652-0622 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.

## 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). Withdrawal is not permitted after the 75% point of a semester.

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

- 1. Students must speak with a Success Coach before withdrawing from courses.
- 2. The student secures a Add-Drop-Withdrawal Form from the Student Services Office.
- 3. Individual schedule changes must be approved by the appropriate instructor.
- 4. Notification of schedule changes must be acknowledged and recorded by the Registrar's Office.
- 5. 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 in accordance with the above.

## Procedures for Student Withdrawal

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

- 1. Students must speak with a Success Coach before withdrawing from courses.
- 2. The student reports to the Student Services Office to obtain a withdrawal form.
- 3. 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.
- 4. 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.
- 5. 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."
- 6. 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.
- 7. 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 progresss 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 tuition and 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. 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.
- 4. Students must fulfill all financial obligations to the College.
- 5. If a student is administratively-identified as being eligible for completing a credential, they can be graduated from said credential, even if the student is not actively in the program.

#### 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. Students who are within 10 hours of program completion in the summer semester may participate in the May graduation ceremony.

There are additional costs for the cap, gown, tassel, and honor chords.

#### 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 for students to 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, this may not be the best method of instruction for all students.

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

#### Methods of Instruction in Distance Education Classes

• Internet/Online (50-53 Section codes designated in the Academic Schedule) 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 MTCC Gmail, telephone, Zoom, and on campus during office hours.

An **Orientation** for complete online classes is provided and highly recommended for new students to attend; the orientation will provide useful information, resources, and tutorials that can help a student to be better prepared to concentrate on the course content, rather than logistics and software issues.

Location: Main Campus. Or Online Orientation Class.

- Primarily Internet with Mandatory Class Meetings (54-56 sections)
- Internet with Work Experience (57-58 sections)
- Clinical/Capstone
- Hybrid and Blended (20-39 section codes designated in the Academic Schedule) courses are offered on campus, and 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. Some classes utilize additional programs that require internet access as a part of the course. A few of the online assisted programs utilized at MTCC are My Math Lab, My Art Lab, Web Tutor, and My Education Lab. The instructor will explain the online components of that particular course.
- *Traditional Day Seated (01-05 sections)* provide an online component with LMS, (Syllabus, Grades etc.)
- Traditional Evening Seated (06-09 sections) provide an online component with LMS (Syllabus, Grades etc.)

#### Non-Traditional Classes

#### Individualized Instruction (Independent Study) (10 section code)

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:

- 1. A 2.50 grade point average or recommendation of faculty advisor.
- 2. Present written documentation for his/her inability to take the course in a regular classroom setting.
- 3. Obtain written approval from faculty and staff.
- 4. Submit the "Individualized Instructions" Form to Office of Student Services with the following signatures:
  - a. Instructor
  - b. Advisor
  - c. Department Dean
  - d. VP for Student Services

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 officially withdrawn from the public school. 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 and/or superintendent. Please note that students 16-17 years of age must contact the College and Career Readiness Department to complete registration and orientation 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 in the same calendar year.

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 in the same calendar year.

## 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.

stThe 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 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.

#### Campus Access Parking and Security Fee (CAPS)

Parking facilities are available for students, visitors, staff and faculty. All Curriculum students are required to pay a \$20.00 per semester CAPS fee. CAPS fee receipts are utilized for student parking, campus security costs, including but not limited to, salaries, related benefits and operating costs associated with security personnel; contracted security services; vehicles, equipment and capital improvements necessary to secure college property.

#### 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 curricula 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 \$35.00 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 scholar-ship 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, adult high school diploma or GED certificate in order to receive federal and/or state financial aid.

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, SEOG funds and state 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. 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:

•	C25800A	Accounting Certificate
•	C35100A	Air Conditioning, Heating & Refrigeration Certificate Level 1
•	C40130A	Applied Engineering Technology Certificate Level 1
•	C60160A	Automotive Systems Technology Certificate Level 1
•	C35130A	Electrical Systems Technology Certificate Level 1
•	C55460C	Emergency Management- Criminal Justice Certificate
•	C55460F	Emergency Management- Fire Technology Certificate
•	C25590A	Information Systems Certificate
•	C25590B	Information Systems (Advanced) Certificate
•	C25590E	Information Technology Software Development Certificate
•	C25590F	Information Technology Advanced Software and Web Development Certificate
•	C25590G	Information Technology Web Administration and Design Certificate
•	C25590H	Information Technology Web Administration and Design Advanced Certificate
•	C40350A	Mechatronics Engineering Technology Certificate Level 1
•	C50420A	Welding Technology Certificate Level 1

### 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 form the IRS to the FAFSA (forms 1040, 1040A or 1040EZ):

- Filing status
- Adjusted gross income (AGI)
- Taxes paid
- Income earned from work
- Exemptions
- Information from appropriate schedules

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 identity/statement of educational purpose

V5 – Aggregate Verification Group

\*This group verifies 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 (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 2022-2023 academic year is September 15, 2023 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 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.

#### North Carolina Longleaf Commitment Grant (NCLCG)

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 NCLCG Grant.

Eligible students for the Longleaf Commitment student aid grant are as follows:

- Be a 2020, 2021, or 2022 NC high school graduate.\*\*
- Be a North Carolina resident according to the NC Residency Determination Service.\*\*
- Be a first-time college student (Career & College Promise (CCP) and Early/Middle College High School students are eligible).
- Enroll in a curriculum program.
- Enroll in at least 6 credit hours per semester.
- Have an Expected Family Contribution (EFC) from \$0-\$15,000 ("EFC" is based upon student's FAFSA determination.

#### North Carolina Longleaf Complete Grant (NCLLC)

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 NCLLC Grant.

Eligible students for the Longleaf Commitment student aid grant are as follows:

- Be a North Carolina resident according to the NC Residency Determination Service,
- Enroll in a curriculum program of study,
- Completed at least 30 semester hours of credit,
- Has not previously completed a postsecondary degree.

#### 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 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 Foundationi, 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

Unless otherwise noted, the application for these scholarships is the McDowell Technical Community College General Scholarship Application and can be picked up in the MTCC Financial Aid Office and is also available online under scholarship applications.

#### McDowell Technical Community College – Learn and Grow Scholarships

Funding from the Emergency Relief Fund (HEERF) is used as a last dollar scholarship to pay for tuition and fees in 2022-2023. Students will need to fill out and finalize a 2022-2023 FAFSA application and will also need to fill out a Learn and Grow Application to apply for these funds. Students who are not eligible to fill out the FAFSA need to let financial aid know about their situation. All other aid will be applied before any awards will be made. Applications are available in the financial aid office and also online under scholarship applications.

#### 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

Unless otherwise noted, the application for these scholarships is the McDowell Technical Community College General Scholarship Application and can be picked up in the MTCC Financial Aid Office and is also available online under scholarship applications.

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.

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#### 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 anually 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.

#### 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.

#### 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 ad 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. <u>A period of six to ten weeks should be allowed for receipt of the Veterans Administration subsistence check</u>.

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/ . For additional questions, please email 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.

#### Serious Injury or Illness

In the event of **Serious Injury or Illness**, the following procedures should be followed:

- 1. Summon EMS ambulance service by calling 911.
- 2. Make the person as comfortable as possible WITHOUT MOVING HER/HIM UNTIL HELP ARRIVES.
- 3. As soon as possible, notify the Security Office at 828-442-1084, 828-652-0673, or the Receptionist/Switchboard Operator at 828-652-6021 extension 0.

\*Note: Additional information about Safety and Security is available on the college's website (www.mcdowelltech.edu) under Services > Safety and Security.

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 <a href="https://www.myhealtheschools.org">www.myhealtheschools.org</a>

#### Virtual Bookstore

MTCC has books available through our virtual bookstore at:

https://bncvirtual.com/mcdowelltech

Students who need assistance or have questions may contact Gwen Reeves in the bookstore, located in Building 14. She may also be reached by phone or email:

828-652-0678 gdreeves24@go.mcdowelltech.edu

#### **Bookstore Hours**

The Campus Bookstore is open Monday through Thursday, 9:00 am - 5:00 pm and Friday, 9:00 am - 2:00 pm. (The bookstore is closed on Fridays during the summer semester.)

#### 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. The only applicants who will be required to take a placement test are those who graduated from a foreign high school and fall outside the other RISE criteria, did not take Math 2 in high school, took the GED prior to 2014, or who earned an Adult High School diploma.

#### **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 official ACT and/or SAT scores for placement.

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.

#### 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 at (828)-652-0678.

#### 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)
- 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 complicance 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:

- 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.

#### Kim Ledbetter Food Pantry

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

For more information, contact 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 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 Personal Business Education Citizenship Development Courses Homemaking Education Family Life Programs Consumer Education
Health and Safety Education
Language Arts Education
Creative Arts Education
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 fulltime 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, Breathalizer 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 That are pre-college and may need 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 youngs 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 barrriers 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 obtainment 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 AdultHigh 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 Education are 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 work-place. 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 work-

place. 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 afer 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

# 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.

TT		/T.	4 .
Hum	anities	l Hine	Arts

Select o	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/Cred	<u>it</u>
I.	Genera	al Educa	tion Courses			
	COM	120	Interpersonal Communication	3	0	3
	or					
	COM	231	Public Speaking	3	0	3
	ENG	111	Writing and Inquiry	3	0	3
	MAT	143	Quantitative Literacy	2	2	3
	Select o	one cour	rse each from Humanities/Fine Arts and Social/E	Behavioral Scien	nces on p	age 76
II.	Major	Courses				
A.	Core C	Courses				
	ACC	120	Principles of Financial Accounting	3	2	4
	ACC	121	Principles of Managerial Accounting	3	2	4
	BUS	115	Business Law	3	0	3
	BUS	225	Business Finance	3	0	3
	CIS	110	Introduction to Computers	2	2	3
	CTS	130	Spreadsheet	2	2	3
	ECO	252	Principles of Macroeconomics	3	0	3
III.	Conce	ntration				
	ACC	129	Individual Income Tax	2	2	3
	ACC	140	Payroll Accounting	1	2	2
	ACC	220	Intermediate Accounting I	3	2	4
IV.	Other	Major C	Courses			
		credits				
	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	221	Intermediate Accounting II	3	2	4
	Take 9	credits	from:			
	BUS	110	Introduction to Business	3	0	3
	BUS	137	Principles of Management	3	0	3
	OST	122	Office Computations	2	2	3
	OST	136	Word 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
			, and the second			
V.	Other R	Required				
	ACC	227	Practices in Accounting	3	0	3
	ACA	115	Success and Study Skills	0	2	1
Total C	redits:	68				
			Recommended Semester Schedu	le		
T1 X7	T 11					
First Yea	ar Fall ACA	115	C 1 C4 1 C1-:11-	0	2	1
	ACC	115 120	Success and Study Skills Principles of Financial Accounting	0 3	2 2	1 4
	BUS	110	Introduction to Business	3	0	3
	CIS	110	Introduction to Dusiness Introduction to Computers	2	2	3
	OST	122	Office Computations	2	2	3
	001	122	Cince Computations	2	2	5
First Yea	ar 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 Yea	ar Summ				_	_
	MAT	143	Quantitative Literacy	2	2	3
	Human	ities Elec	tive	3	0	3
Second	Year Fall					
occona	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 S	cience El	ective	3	0	3
Second	Year Spri	ng				
	ACC	150	Accounting Software Applications	1	3	2
	ECO	252	Principles of Macroecomonics	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 Sum	ımer				
occond	ACC	227	Practices in Accounting	3	0	3
	COM	231	Public Speaking	3	0	3
	or		ob	ū	Ü	-
	COM	120	Interpersonal Communication	3	0	3
			1			

### Accounting Certificate Program (C25800A)

<u>Title</u>				Class	/Lab/Cre	<u>dit</u>
I.	Major	Courses				
	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

II.	Other Major Courses							
	BUS	110	Introduction to Business	3	0	3		
Total Credits: 14								
			Recommended Semester Se	chedule				
First Ye	ar 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 Ye	ar Sprin	g						
	ACC	121	Principles of Managerial Accounting	3	2	4		
	Accou	ınts Pay	able, Accounts Receivable, Bookkeeping	g Certificate	Progra	m (C25800B)		
Title				Class/I	Lab/Credi	it		
I.	Major	Courses		C1a55/1	Lab/Cicui	<u></u>		
1.	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		
	CIS	110	introduction to computers	2	2	3		
II.		Major Co						
	ACC	180	Practices in Bookkeeping	3	0	3		
	OST	153	Office of Finance Solutions	2	2	3		
Total C	Credits: 1	7						
			Recommended Semester So	chedule				
F: . 37	r 11							
First Ye		120	D: 11 CA (:	2	2	4		
	ACC	120	Principles of Accounting	3	2	4		
	CIS	110	Introduction to Computers	2	2	3		
First Ye	ar Sprin	g						
	ACC	121	Principles of Managerial Accounting	3	2	4		
	ACC	180	Practices in Bookkeeping	3	0	3		
	OST	153	Office Finance Solutions	2	2	3		
				(6250	000)			
			Income Tax Preparer Certificate Pro	gram (C238)	OOC)			
<u>Title</u>	3.5.4			Class/	Lab/Cred	<u>it</u>		
I.		Courses	District Constitution	2		4		
	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		
II.	Other	Major Co	nurses					
11.	ACC	130	Business Income Taxes	2	2	3		

	BUS	110	Introduction to Business	3	0	3
Total C	redits: 1	7				
			Recommended Semester So	chedule		
First Ye	ar 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 Ye	ar Spring	g				
	ACC	121	Principles of Managerial Accounting	3	2	4
	ACC	130	Business Income Taxes	2	2	3
			Payroll Accounting Clerk Certificate Pr	rogram (C2	5800D	)
			Tayrou Incomming Carn Certificant I			
<u>Title</u>	17.	<u> </u>		Class	/Lab/Cred	<u>it</u>
I.	,	Courses	Deire die lee of Financial Accounting	2	2	4
	ACC	120	Principles of Financial Accounting	3	2 2	4
	ACC ACC	121	Principles of Managerial Accounting	3 1	3	4 2
	CIS	140	Payroll Accounting	2	<i>3</i> 2.	3
	CIS	110	Introduction to Computers	2	2	3
II.	Other 1	Major Co	ourses			
II.	Other I	Major Co 153	Office Finance Solutions	2	2	3
		153		2	2	3
	OST	153			2	3
	OST redits: 1	153	Office Finance Solutions		2	3
Total C	OST redits: 1	153	Office Finance Solutions		2	3
Total C	OST redits: 10 ar Fall	153 <b>6</b>	Office Finance Solutions  *Recommended Semester Solutions**	chedule		
Total C	OST redits: 10 ar Fall ACC	153 6 120 110	Office Finance Solutions  **Recommended Semester Solutions**  Principles of Accounting	chedule	2	4
Total C	OST redits: 10 ar Fall ACC CIS ar Spring	153 6 120 110	Office Finance Solutions  **Recommended Semester Solutions**  Principles of Accounting	chedule	2	4
Total C	OST  redits: 10  ar Fall  ACC  CIS  ar Spring	153 6 120 110	Office Finance Solutions  **Recommended Semester Solution**  Principles of Accounting Introduction to Computers	<b>shedule</b> 3 2	2 2	4 3

## 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/Cred	<u>it</u>
I.	Genera	d Educa	tion Courses			
	COM	120	Interpersonal Communication	3	0	3
	or					
	COM	231	Public Speaking	3	0	3
	ENG	111	Writing and Inquiry	3	0	3
	MAT	143	Quantitative Literacy	2	2	3
	Select o	one cour	se each from Humanities/Fine Arts and Social/E	Behavioral Scie	nces on J	page 76
II.	Major	Courses				
A.	Core C	Courses				
	ACC	120	Principles of Financial Accounting	3	2	4
	ACC	121	Principles of Managerial Accounting	3	2	4
	BUS	115	Business Law	3	0	3
	BUS	225	Business Finance	3	0	3
	CIS	110	Introduction to Computers	2	2	3
	CTS	130	Spreadsheet	2	2	3
	ECO	252	Principles of Macroeconomics	3	0	3
III.	Conce	ntration				
	BAF	143	Financial Planning	3	0	3
	BAF	147	Business Insurance	3	0	3
	BAF	125	Personal Finance	3	0	3
IV.	Other	Major C	Courses			
		credits				
	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
	Take 9	credits	from:			
	ACC	221	Intermediate Accounting II	3	2	4
	BUS	110	Introduction to Business	3	0	3
	BUS	137	Principles of Management	3	0	3
	OST	122	Office Computations	2	2	3
	OST	136	Word 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.			d Courses			
	ACC	227	Practices in Accounting	3	0	3
	ACA	115	Success and Study Skills	0	2	1
Total (	Credits:	68				
			Recommended Semester S	Schedule		
First V	ear Fall					
11136 1	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 Y	ear Spring	_				
	ACC	121	Principles of Managerial Accounting	3	2	4
	BAF	111	Teller Training	3	0	3
	BUS	115	Business Law	3	0	3
	CTS	130	Spreadsheet	2	2	3
First Y	ear Sumn	ner				
	MAT	143	Quantitative Literacy	2	2	3
	Humar	nities Ele	·	3	0	3
Second	d Year Fal					
	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 l	Elective	3	0	3
Secono	d Year Spi	ring				
	ACC	150	Accounting Software Applications	1	3	2
	ECO	252	Principles of Macroecomonics	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
C-	1V 6					
Second	<b>d Year Su</b> ACC	nmer 227	Practices in Accounting	2	0	2
	COM	120	Practices in Accounting Interpersonal Communication	3	0	3
	or	120	interpersonal Communication	3	U	3
	COM	231	Public Speaking	3	0	3

### Financial Services Certificate Program (C25800E)

Title				Class	Lab/Cred	<u>it</u>
I.	Major	Courses				
	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
	BAF	143	Financial Planning	3	0	3
II.	Other 1	Major C	ourses			
	BAF	111	Teller Training	3	0	3
	Total C	Credits: 1	7			
			Recommended Semester Sche	dule		
First Ye	ar 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 Ye	ar Spring	g				
	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		<u>redit</u>			
I. Genera	ıl Educ	ation Courses			
COM	120	Interpersonal Communications	3	0	3
or		•			
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select o	one cou	arse each from Humanities/Fine Arts and So	cial/Behavio	ral Sci	iences on page 76.
ART	111	Art Appreciation **Recommended	3	0	3
PSY	150	General Psychology **Recommended	3	0	3
II. Majo		ses			
A. Cor					
Require			2	2	2
GRD	110	Typography I	2 2	2 4	3
GRD	280	Portfolio Design	2	4	4
ART		ect Areas	0	6	2
	121	Two-Dimensional Design	0	6	3 2
GRD	121	Drawing Fundamentals I	1 2	3 4	4
GRD GRD	141	Graphic Design II	2	4	4
	142	Graphic Design II	1	4	
GRD	151	Computer Design Basics	_	_	3
GRD	152	Computer Design Techniques I	1	4	3
		or Courses			
Take 2					
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
GRD	281	Design of Advertising	1	3	2

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. Othe	er Requ	uired Courses			
ACA	115	Success and Study Skills	0	2	1

**Total Credits: 71** 

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 120 Interpersonal Communications	3	0	3
or			
COM 231 Public Speaking	3	0	3
GRD 110 Typography	2	2	3
GRD 142 Graphic Design II	2	4	4
GRD 281 Design of Advertising	1	3	2
First Year-Summer			
GRD 160 Photo Fundamentals I	1	4	3
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			

### Advertising and Graphic Design Diploma Program (D30100)

Title			Class/Lab/C	Class/Lab/Credit		
I Canara	l Educ	ation Courses				
COM	120	Interpersonal Communications	3	0	3	
or	120	interpersonal Communications	3	U	3	
COM	231	Public Speaking	3	0	3	
ENG	111	Writing and Inquiry	3	0	3	
LIVG	111	witting und inquiry	J	O	3	
II. Major	Cours	ees				
Core						
GRD	110	Typography I	2	2	3	
GRD	280	Portfolio Design	2	4	4	
Require	ed Sub	ject Areas				
ART	121	Two-Dimensional Design	0	6	3	
GRD	121	Drawing Fundamentals 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	
III. Othe	er Maio	or Courses				
ART	171	Digital Design I	0	6	3	
ART	275	Introduction to Graphic Design	0	6	3	
GRD	281	Design of Advertising	1	3	2	
TV O.1	D	. 10				
ACA		ired Courses	0	2	1	
ACA	115	Success and Study Skills	0	2	1	
Total C	Credits:	41				
		Recommend	ed Semester S	chedi	ıle	
First Year	-Fall					
ACA	115	Success and Study Skills	0	2	1	
ART	121	Two-Dimensional Design	0	6	3	
ART	275	•	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	Saria	σ.				
ART	- <b>3pm</b> 171	g Digital Design I	0	6	3	
GRD	110	Typography I	2	2	3	
GRD	142	Graphic Design II	2	4	4	
GRD	152	Computer Design Techniques	1	4	3	
GRD	281	Design of Advertising	1	3	2	
First Year						
COM	120	Interpersonal Communications	3	0	3	
or COM	231	Public Speaking	3	0	3	
ENG	111	Public Speaking Writing and Inquiry	3	0	3	
GRD	280	Portfolio Design	2	4	4	
	_00	· ····· - ·····	_	-	-	

### Advertising and Graphic Design Certificate Program (C30100)

Title	Title Class/Lab/Credit				
I. Major	Course	es			
ARŤ	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 C	Credits:	16			
		Recommende	ed Semester S	chedi	ıle
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	_	0	6	3
Second Ye	ear-Fal	1			
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) D35100A (Diploma) C35100A (Certificate) C35100B (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/C	redit			
I. General Education Courses							
COM	120	Interpersonal Communications	3	0	3		
or							
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	2 6	5
AHR	111	HVACR Electricity	2	2 2	3
AHR	112	Heating Technology	2	2 4	4
AHR	113	Comfort Cooling	2	2 4	4
AHR	114	Heat Pump Technology	2	2 4	4
AHR	130	HVAC Controls	2	2 2	3
AHR	211	Residential System Design	2	2 2	3
AHR	212	Advanced Comfort Systems	2	2 6	4
AHR	213	HVACR Building Code	]	2	2

#### III. Other Major Courses

Take 8 cre	dits				
AHR	180	HVACR Customer Relations	1	0	1
BPR	135	Schematics and Diagrams	2	0	2
ELC	128	Introduction to PLC	2	2	3
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
Take 12 c	redits				
AHR	115	Introducation to Refrigeration	1	3	2
AHR	160	Refrigerant Certification	1	0	1
CIS	110	Introduction to Computers	2	2	3
EGR	125	Application Software for Tech	1	2	2
REF	117	Refrigeration Controls	2	6	4
IV. Othe	r Requ	ired Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1

**Total Credits:** 69

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
ISC	112	Industrial Safety	2	0	2
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-	-Summ	ier			
AHR	114	Heat Pump Technology	2	4	4
AHR	115	Refrigeration Systems	1	3	2
Second Ye	ar-Fall	I.			
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 Ye	ar-Spr	ing			
AHR	211	Residential System Design	2	2	3
BPR	135	Schematics and Diagrams	2	0	2
CIS	110	Introduction to Computers	2	2	3
COM	120	Interpersonal Communications	3	0	3
Elective		Social/Behavior Science	3	0	3

# Second Year-SummerACA220Professional Transition101REF117Refrigeration Controls264ElectiveHumanities/Fine Arts303

**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, ISC 112, AHR 130

### Air Conditioning, Heating and Refrigeration Technology Diploma Program (D35100)

Title			Class/Lab/Credit		
I. Genera	al Educ	ation Courses			
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
II. Majo	r Cour	ses			
AHR	110	Introduction to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
AHR	112	Heating Technology	2	4	4
AHR	113		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. Otl	ner Maj	or Courses			
Take 4 cr	edits				
BPR	135	Schematics and Diagrams	2	0	2
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	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
Take 4 cr	edits				
AHR	160	Refrigeration Certificate	1	0	1
CIS	110	Introduction to Computers	2	2	3
IV. Othe	r Requ	ired Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1
ACA	115	Success and Study Skills			

**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 Yea	ır-Sprii	ng			
AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4
AHR	130	HVAC Controls	2	2	3
AHR	211	Residential System Design	2	2	3
BPR	135	Schematics and Diagrams	2	0	2
First Year	-Sumn	ner			
AHR	114	Heat Pump Technology	2	4	4
CIS	110	Introduction to Computers	2	2	3
MAT	143	Quantitative Literacy	2	2	3
Second Y	ear-Fal	1			
ACA	220	Professional Transition	1	0	1
AHR	213	0	1	2	2
ENG	111	Writing and Inquiry	3	0	3
ISC	112	Industrial Safety	2	0	2

### $Air\ Conditioning,\ Heating\ and\ Refrigeration\ Technology\ Certificate\ Program\ (C35100A)\ Level\ I$

Title			Class/Lab/Credit		
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

### **Total Credits: 12**

First Year	-Fall				
AHR	110	Introduction to Refrigeration	2	6	5
AHR	111	HVACR Electricity	2	2	3
First Year		,			
AHR	112	Heating Technology	2	4	4

### Air Conditioning, Heating and Refrigeration Technology Certificate Program (C35100B) Level II

<u>Title</u>			Class/Lab/C	<u>redit</u>	
I. Majo	r Cour	ses			
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					

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 Yea	ır-Sprii	ng			
AHR	112	Heating Technology	2	4	4
AHR	113	Comfort Cooling	2	4	4

# Applied Engineering Technology

A40130 (Associate Degree), D40130 (Diploma), C40130A (Certificate), C40130B (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/Ci	redit				
I. Genera	I. General Education Courses							
COM	120	Interpersonal Communications	3	0	3			
or								
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	e each from Humanities/Fine Arts and Socia	l/Behavioral	l Scier	nces on page 76			
	-							
II. Maj A.Core C	or Cou	irses						
EGR	125	Applied Software for Technology	1	2	2			
ISC	112	Industrial Safety	2	0	2			
100	112	industrial balety	2	U	2			
III. Con	centra	tion						
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			
		or Courses						
Take 8 cre	edits							
ELN	133	Digital Electronics	3	3	4			
MAC	121	Introduction to CNC	2	0	2			
MNT	110	Introduction to Maintenance Procedures	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			

Take 23 c	radita				
AHR	110	Introduction to Defriceration	2	6	5
CIS	110	Introduction to Refrigeration	2	2	3
ELN	233	Introduction to Computers	3	3	4
EGR	150	Microprocessor Systems Introduction to Engineering	1	2	2
MEC	130	Mechanisms	2	2	3
PHY	130	Physics-Mechanics	3	2	4
WLD	112	Basic Welding Processes	1	3	2
V. Other	Requir	ed Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1
Total Cre	edits:	67			
		Recommended Sen	nester Sch	edule	
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	r-Sprin	g.			
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	r-Sumn	ier			
MAT	121	Algebra/ Trigonometry	2	2	3
Humanit			3	0	3
Social Sci	ience E	lective	3	0	3
Second Y	ear-Fal	1			
AHR	110	Introduction to Refrigeration	2	6	5
ATR	112	Introduction to Automation	2	3	3
MAC	121	Introduction to CNC	2	0	2
MEC	130	Mechanisms	2	3	3
WLD	112	Basic Welding Processes	1	3	2
Second Y	ear-Spi				
ACA	220	Professional Transition	1	0	1
COM	120	Interpersonal Communications	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

**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, ISC 112

### Applied Engineering Diploma Program (D40130)

Title	Title Class/Lab/Credit				
I. Genera	l Educ	ation Courses			
COM	120	Interpersonal Communications	3	0	3
or		•			
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
II. Maj	or Cou	ırses			
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. Oth	er Maj	or Courses			
Take 4 ho	-				
MAC	121	Introduction to CNC	2	0	2
MNT	110	Introduction to Maintenance Procedures	1	3	2
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
		8			
Take 7 ho	urs				
CIS	110	Introduction to Computers	2	2	3
ELN	233	Microprocessor Systems	3	3	4
		,			
IV. Oth	er Req	uired Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1
Total Cr	edits:	38			
		Recommended S	Semester Sche	dule	
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 Y	ear-Fal	I			
ACA	220	Professional Transition	1	0	1
ATR	112	Introduction to Automation	2	3	3
CIS	110	Introduction to Computers	2	2	3
COM	120	Interpersonal Communication	3	0	3
MAC	121	Introduction to CNC	2	0	2
		<b>Applied Engineering Certifi</b>	cate Program	m (C	4013

### 30A) Level I

Title			Class/Lab/Cr	<u>edit</u>	
I. Major	Course	es			
ATR	112	Introduction to Automation	2	3	3
ELC	131	Circuit Analysis	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
MNT	110	Introduction to Maintenance Procedures	1	3	2

#### **Total Credits**: 12

#### Recommended Semester Schedule

First Year	-Fall				
ATR	112	Introduction to Automation	2	3	3
ELC	131	Circuit Analysis I	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
First Year	-Sprin	g			
MNT	110	Introduction to Maintenance Procedures	1	3	2

### Applied Engineering Certificate Program (C40130B) Level II

Title		Class/Lab/Cro	<u>edit</u>		
I. Major (	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. Oth	er Maj	or Courses			
MNT	110	Introduction to Maintenance Procedures	1	3	2

### **Total Credits**: 16

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 Yea	r-Spring	9			
DFT	119	Basic CAD	1	2	2
MNT	110	Introduction to Maintenance Procedures	1	3	2

# Automotive Systems Technology

A60160 (Associate Degree) D60160 (Diploma) C60160A (Certificate) C60160B (Certificate)

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entrylevel 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.

on page 76.

<u>Title</u>			Class/Lab/Cr	<u>edit</u>	
I. Genera	d Educ	ation Courses			
COM	120	Interpersonal Communications	3	0	3
or					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select o	one cou	urse each from Humanities/Fine Arts and So	ocial/Behavio	ral Sc	iences
II. Majo	r Cour	ses			
TRN	120	2013FA Basic Transportation Electricity	4	3	5
TRN	140	Transportation Climate Control	1	2	2
TRN	170	2013FA PC Skills for Transportation	1	2	2
III. Conc	entrati	on			
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	· Majoı	Courses			
Take 8	-				
AUT	183	Engine Performance-2	2	6	4
TRN	112	Powertrain Maint./Light Repair	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
T. 1 . 20	194				
Take 29 c					2
ATT	115	Green Trans. Safety & Service	1	4	3
ATT	125	Hybrid-Electric Trans	2	4	4
ATT	140	Emerging Transp Tech	2	3	3
AUT	113	Automotive Servicing I	0	6	2
AUT		Engine Repair Lab	0	3	1
AUT		Suspension and Steering Lab	0	3	1
AUT		Brake Systems Lab	0	3	1
AUT		Engine Performance I Lab	0	3	1
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 L	ab0	3	1
LDD	112	Intro Light-Duty Diesel	2	2	3
LDD	181	LDD Fuel Systems	2	6	4
TRN	111	Chasis Maint/Light Repair	2	6	4
TRN	130	Introduction to Sustainable Transportation	2	2	3
TRN	140A	Transportation Climate Control Lab	1	2	2
TRN	145	Advanced Transportation Electronics	2	3	3
TRN	180	Basic Welding for Transportation	1	4	3
III Othe	r Requi	ired Courses			
ACA	115		0	2	1
ACA	220	Professional Transition	1	0	1
11011	0	TOTOGOTOM TIMIOMON	•	J	1

**Total Credits: 75** 

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	-Summ	er			
AUT	183	Engine Performance II	2	6	4
TRN		Transportation Climate Control	1	2	2
TRN	140A	Transportation Climate Control Lab	1	2	2
Humanities Elective-see page 76 3 0					3

Second Ye	ar-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 L	ab0	3	1
TRN	180	Basic Welding for Transportation	1	4	3
Social/E	Behavio	ral Science Elective- See page 76	3	0	3
Second Ye	ar-Spri	ng			
ACA	220	Professional Transition	1	0	1
AUT	113	Automotive Servicing I	0	6	2
COM	120	Interpersonal Communication	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 Ye	ar-Sum	ımer			
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 231A, AUT 231A, AUT 113, TRN 112

### Automotive Systems Technology Diploma Program (D60160)

Title			Class/Lab/Ci	redit	
I. Genera	d Educ	ation Courses			
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
II. Majo	r Cours	ses			
AUT	116	Engine Repair	2	3	3
TRN	120	2013FA Basic Transportation Electricity	4	3	5
TRN	170	2013FA PC Skills for Transportation	1	2	2
III. Conc	entrati	on			
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 4 ho					
AUT	183	Engine Performance-2	2	6	4
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2

Take 14 cr	edits				
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
TRN	111	Chasis Light Maint/Light Repair	2	6	4
TRN	112	Intro to Sustainable Transp	2	6	4
III. Other l	Require	d Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1

Total Credits: 45

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
TRN	111	Chasis Light Maint/Light Repair	2	6	4
First Year-	Summo	er			
AUT	183	Engine Performance II	2	6	4
Second Ye	ar-Fall				
ENG	101	Applied Communications I	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
Second Ye	ar-Spri	ng			
ACA	220	Professional Transition	1	0	1
AUT	113	Automotive Servicing I	0	6	2
TRN	112	Intro to Sustainable Transp	2	6	4
Second Ye	ar-Sum	nmer			
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

### Automotive Systems Technology Certificate Program (C60160A) Level I

<u>Title</u>			Class/Lab/Cre	<u>edit</u>	
I. Major	Course	es			
AUT	113	Automotive Servicing I	0	6	2
TRN	111	Chasis Maint/Light Repair	2	6	4
TRN	112	Powertrain Maint./Light Repair	2	6	4
TRN	170	PC Skills for Transportation	1	2	2

**Total Credits: 12** 

High School Ariculation: Automotive Service I= TRN 111, Automotive Service II= TRN 112, Automotive Service III= AUT 113.

### Recommended Semester Schedule

First Year	-Fall				
TRN	170	PC Skills for Transportation	1	2	2
		•			
First Year	-Spring				
AUT	113	Automotive Servicing I	0	6	2
TRN	111	Chasis Maint/Light Repair	2	6	4
TRN	112	Powertrain Maint./Light Repair	2	6	4

### Automotive Systems Technology Certificate Program (C60160B) Level II

Title			Class/Lab/Cr	<u>edit</u>	
I. Major	r Course	s			
AUT	113	Automotive Servicing I	0	6	2
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
TRN	111	Chasis Maint/Light Repair	2	6	4
TRN	112	Powertrain Maint./Light Repair	2	6	4
TRN	170	PC Skills for Transportation	1	2	2

**Total Credits: 16** 

First Year	-Fall				
AUT	116	Engine Repair	2	3	3
AUT	116A	Engine Repair Lab	0	3	1
TRN	170	PC Skills for Transportation	1	2	2
First Year	-Spring				
AUT	113	Automotive Servicing I	0	6	2
TRN	111	Chasis Maint/Light Repair	2	6	4
TRN	112	Powertrain Maint./Light Repair	2	6	4

# 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

I. Major Courses

CJC 110 Basic Law Enforcement BLET 10 30 20

**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/C1	<u>edit</u>	
I. Genera	l Educ	ation Courses			
COM	120	Interpersonal Communications	3	0	3
or					
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.

TT	- 1		
П	. N	laıor	Courses

II. Iviajo	Cours	SES			
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

BUS	125	Personal Finance	3	0	3
BUS	153	Human Resources Management	3	0	3
BUS	225	Business Finance	2	2	3
BUS	147	Rusiness 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	Requi	red Courses			
		Success and Study Skills	0	2	1

**Total Credits: 71** 

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	-Sprin	g			
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
Human	ites/Sc	ocial Sciences Elective-See list on page 75	3	0	3
First Year	-Sumn	ner			
BUS	147	Business Insurance	3	0	3
BUS	230	Small Business Management	3	0	3
Second Yo	ear-Fal	1			
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 Ye	ear-Spi	ring			
BUS	153	Human Resource Management	3	0	3
ECO	252	Principles of Macroeconomics	3	0	3
OST		*	3	0	3
OST	136	Word Processing	2	2	3
Human	ities/S	ocial Sciences Elective-See list on page 76	3	0	3
Second Yo	ear-Su	mmer			
COM	120	Interpersonal Communications	3	0	3
or		1			
COM	231	Public Speaking	3	0	3

### **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				
I. Gen	eral Ed	lucation Courses				
COM	120	Interpersonal Communications	3	0	3	
or						
COM	231	Public Speaking	3	0	3	
ENG	111	Writing and Inquiry	3	0	3	
MAT	143	Quantitative Literacy	2	2	3	
Select o	one cou	urse each from Humanities/Fine Arts and So	ocial/Behavior	al Sci	ences on Page76.	
II. Major	r Cour	ses				
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. Conc	entrati	on				
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	
IV. Other	· Majoı	Courses				
		s 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

2 1

**Total Credits: 70** 

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	-Sprin				
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
Human	ites/Sc	ocial Sciences Elective-See list on page 76	3	0	3
First Year	-Sumn	ier			
COM	120	Interpersonal Communications	3	0	3
or					
COM	231	Public Speaking	3	0	3
MKT	220	Advertising & Sales Promotion	3	0	3
Second Yo	ear-Fal	1			
ACC	120	Principles of Financial Accounting	3	2	4
ECO	251	Principles of Microeconomics	3	0	3
BUS	137	1 0	3	0	3
MKT	123	Fundamentals of Selling	3	0	3
MKT	121	Retailing	3	0	3
Second Yo	ear-Spi	ring			
ACC	121	Principles of Managerial Accounting	3	2	4
ECO	252	Principles of Macroeconomics	3	0	3
MKT	225	Market Research	3	0	3
Human	ities/S	ocial Sciences Elective-See list on page 76	3	0	3
Second Ye	ear-Sui	nmer			
MKT	227	Marketing Applications	3	0	3

### **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.

Class/Lab/Credit

Title			Class/Lab/C	<u> rean</u>	
1.0	151				
		ation Courses	2	0	2
COM	120	Interpersonal Communications	3	0	3
or	221	D 11: 0 1:	2	0	2
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select o	one cou	urse each from Humanities/Fine Arts and Se	ocial/Behavio	oral Sc	iences on page 76.
II. Majo	r Cour	ses			
ACC	120	Principles of Financial Accounting	3	2	4
BUS	110	Introducation 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. Con	ncentra	tion			
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
TV O.1					
		r <b>Courses</b> (Take 12 credits from this list.)	2	0	2
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

**Total Credits: 65** 

### Recommended Semester Schedule

0 2 1

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
ISC	121	Environmental Health & Safety	3	0	3
MKT	223	Customer Service	3	0	3
First Year	-Spring				
BUS	115		3	0	3
ISC	130	Introduction to Quality Control	3	0	3
MKT	120	•	3	0	3
OMT		Materials Management	3	0	3
		ective-See list on page 76	3	0	3
First Year	-Summ	ner			
ENG	111	Writing and Inquiry	3	0	3
PSY	150	General Psychology	3	0	3
Second Ye	ar Fall	1			
ACC	120		3	2	4
BUS	137	1	3	0	3
CTS	137	Spreadsheets	2	2	3
ECO	251	Principles of Microeconomics	3	0	3
0 177					
Second Ye	•		2	0	2
ISC	210	Operations and Production Planning	3	0	3
MAT		,	2	2	3
OST	136	e	2	2	3
OST	286	Professional Development	3	0	3
Second Ye	ear-Sur	nmer			
COM	120	Interpersonal Communications	3	0	3
or COM	231	Public Speaking	3	0	3
OMT	260	Issues in Operations Management	3	0	3

### Business Administration: Operations Management Certificate Program (C25120O)

Title	Title			<u>redit</u>	
I. Major	r Course	es			
BUS	137	Principles of Management	3	0	3
CIS	110	Introduction to Computers	2	2	3
II. Co	ncentra	ition			
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 2 2 3 OST 136 Word Processing **Total Credits: 18** Recommended Semester Schedule First Year-Fall 3 BUS 137 Principles of Management 0 CIS 110 Introduction to Computers 2 2 3 3 0 3 **ISC** 121 Environmental Health & Safety First Year-Spring ISC 130 Introduction to Quality Control 3 0 ISC 210 Operation & Production Planning 0 3

2

3

2

OST

136

Word Processing

# 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. <u>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.</u>

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 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						
I. Genera	l Educ	ation 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	
Humanit	ies/Co	mmunications (9 semester hours)				
Take 3	credits	1				
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/Be	havior	al Sciences (9 semester hours)				
Select 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	
Take 2 ad	ditiona	al courses from the following:				
ECO	251	Principles of Microeconomics	3	0	3	
ECO	252	Principles of Macroeconomics	3	0	3	
		•	110			

POL	120	American Government	3	0	3
PSY	150		3	0	3
SOC	210	Introduction to Sociology	3	0	3
		07			
Natural S	cience a	and Math (8 semester hours)			
Select one	science	e 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 c	courses:			
MAT	143		2	2	3
MAT`		Statistical Methods	3	2	4
MAT	171	Precalculus Algebra	3	2	4
TT A 1 15.5	1.0	101 2			
Take 3 g		eneral Education			
Take 3 g	_				
CIS	110	Introduction to Computers	3	0	3
Take 3 c		introduction to Computers	3	U	3
MAT		Quantitative Literacy	2	2	3
MAT		- /	3	2	4
MAT	171		3	2	4
MAT	171	Pre-Calculus Trigonometry	3	2	4
MAT	271	Calculus I	3	2	4
Take 8 c		Calculus I	3	4	I
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		General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST		General Astronomy II Lab	0	2	1
BIO	111	·	3	3	4
BIO	112	-	3	3	4
CHM	131	Introduction to Chemistry	3	0	3
CHM		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		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
	5171	212	intermediate Spanish II	3	U	3
T	II Other	Requi	rements (15 semester hours)			
•		_	Requirements			
	Take:	1001	equirements			
	ACA	122	College Transfer Success	1	0	1
	Take on			1	U	1
	HEA	110	Personal Health/Wellness	3	0	3
	PED	110	Fit and Well for Life	1	2	2
	TLD	110	The difference in the Elic	1	2	2
	Take 12	credits				
	ACC	120	Principles of Financial Accounting I	3	2	4
	ACC	121		3	2	4
	ART	111	Principles of Financial Accounting II Art Appreciation	3	0	3
	ART	121	Two-Dimensional Design	0	6	3
	ART	171	Digital Design I	0	6	3
	ART	275		0	6	3
	ASL		Introduction to Graphic Design	3		3
	ASL	111 112	Elementary ASL II	3	0	3
	ASL	181	Elementary ASL II ASL Lab I	0	2	3 1
	ASL	101	AGE LAU I	112	2	1
				114		

ASL	182	ASL Lab II	0	2	1
AST	151	•	3	0	3
AST		General Astronomy I Lab	0	2	1
AST	152	General Astronomy II	3	0	3
AST		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		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  Critical Thinking	3	0	3
HUM HUM	115 120	Critical Thinking Cultural Studies	3	0	3
HUM	120	Southern Culture	3	0	3
110101	144	113	5	U	3
		113			

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		Conceptual Physics Lab	0	2	1
PHY	151	- · · · · · · · · · · · · · · · · · · ·	3	2	4
	151	College Physics I	3	2	
PHY	251	College Physics I	3	3	4
PHY		General Physics I			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. <u>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.</u>

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.

<u>Title</u> <u>Class/Lab/Cre</u>		<u>edit</u>			
I. Genera	ıl Educ	ation Requirements.			
Natural S Take 1 of					
Group					
Take 8		s from:			
BIO	111	General Biology I	3	3	4
BIO	112	General Biology II	3	3	4
Group	2				
Take 8	credits	s from:			
CHM	151	General Chemistry I	3	3	4
CHM	152	General Chemistry II	3	3	4
Grou	р 3				
Take	8 credi	ts from:			
PHY	151	College Physics I	3	2	4
PHY	152	College Physics II	3	2	4
Math					
Take 8 c		from:			
MAT	171		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	Cours	ses (6 semester hours)			
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanit	ies/Co	mmunications (6 semester hours)			
Select on	e cours	e 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		American Literature I	3	0	3
ENG		American Literature II	3	0	3
		British Literature I	3	0	3
ENG	242	British Literature II	3	0	3
Social/Bel	haviora	1 Sciences (6 semester hours)			
Select one					
HIS		World Civilizations I	3	0	3
HIS		World Civilizations II	3	0	3
		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	_	3	0	3
POL		American Government	3	0	3
PSY	150		3	0	3
SOC	210	Introduction to Sociology	3	0	3
		6/			
II. Additio	onal Ge	eneral Education (11 semester hours)			
Take 2					
Take 3 o					
CIS	110	Intro to Computers	2	2	3
		-			
Take 8 o	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		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		Conceptual Physics		3	0	3
PHY	110			0	2	1
		Conceptual Physics Lab		3	2	4
PHY	151	College Physics I		3	2	
PHY	152	College Physics II		3		4
PHY	251	General Physics I		3	3	4
PHY	252	General Physics II			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			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 Oth	or Dogui	romants (15 comester hours)				
	_	rements (15 semester hours) quirements (3 semester hours)				
Take:	1 CC RCC	quirements (5 semester nours)				
ACA	122	College Transfer Success		1	0	1
	ne cours			1	U	1
HEA	110	Personal Health/Wellness		3	0	3
PED	110	Fit and Well for Life		1	2	2
TED	110	The and wen for Life		1	2	2
Select 12	addition	nal 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
		· · · · · · · · · · · · · · · · · · ·	117	-	-	-

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		2	2	4
		General Microbiology			
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		3	0	3
		Storytelling			
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		Personal Health/Wellness	3	0	3
	110				
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	
PHI	219	History of Philosophy	3	0	1 3
		Intro. to Ethics	3		
PHI	240		3	0	3
PHY	110	Conceptual Physics Lab		0	3
PHY		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

## 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/C	<u>redit</u>	
I. Gener	al Edu	cation Courses			
COM	120	Interpersonal Communications	3	0	3
or		•			
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry	2	2	3
Select o	ne cou	irse each from page 76:			
Humanities/Fine Arts		3	0	3	
Social a	and Bel	havioral Science	3	0	3
II. Major	r Cour	ses			
BPR	111	Print Reading	1	2	2
MAC	121	Introduction to CNC	2	0	2
MAC	141	Machining Applications I	2	6	4
MAC	142	Machining Applications II	2	6	4
III. Othe	r Majo	r Requirements			
Take 8 cr	edits	_			
ISC	112	Industrial Safety	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
Take 29 c	redits				
CIS	110	Introduction to Computers	2	2	3
DFT	119	Basic CAD	1	2	2
MAC	114	Intro to Metrology	2	0	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	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	241	Jigs & Fixtures I	2	6	4
IV. Othe	r Regu	ired Courses			
ACA	115	Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1

**Total Credits: 66** 

### 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	114	Intro to Metallurgy	2	0	2
First Year	-Spring	<u>r</u>			
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	-Sumn	ner			
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry	2	2	3
Human	ities/F	ine Arts Elective- see list on page 75	3	0	3
Second Y	ear-Fal	ll .			
ISC	112	Industrial Safety	2	0	2
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 Ye	becond Year-Spring								
ACA	220	Professional Transition	1	0	1				
COM	120	Interpersonal Communications	3	0	3				
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				
Social/B	Social/Behavioral Science Elective-see list on page 75			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: 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

## Computer Integrated Machining Diploma Program (D50210)

Title		Class/Lab/C	<u>redit</u>		
I. Gener	ral Edu	cation Courses			
ENG	101	Applied Communications	3	0	3
MAT	110	Mathematical Measurement and Literacy	2	2	3
II. Majo	r Cours	ses			
BPR	111	Print Reading	1	2	2
MAC	121	Introduction to CNC	2	0	2
MAC	141	Machining Applications I	2	6	4
MAC	142	Machining Applications II	2	6	4
III. Othe	r Majo	r Requirements			
Take 4 cr	edits				
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	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
Take 15 o	credits				
CIS	110	Introduction to Computers	2	2	3
ISC	112	Industrial Safety	2	0	2
MAC	124	CNC Milling	1	3	2
MAC	151	Machining Calculations	1	2	2
MAC	231	CAM: CNC Turning	1	4	3
MAC	232	CNC Graphics Prog: Milling	1	4	3
IV. Othe	r Requ	ired Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1

**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	3			
MAC	124	CNC Milling	1	3	2
MAC	142	Machining Applications II	2	6	4
MAC	232	CNC Graphics Prog: Milling	1	4	3
PLA	110	Introduction to Plastics	2	0	2
First Year	-Summ	ner			
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 Ye	ar-Fall	I			
ACA	220	Professional Transition	1	0	1
ISC	112	Industrial Safety	2	0	2
MAC	151	Machining Calculations	1	2	2
MAC	231	CAM: CNC Turning	1	4	3
MEC	142	Physical Metallurgy	1	2	2

## CNC Machine Operator Certificate (C50210C)

Title		Class/Lab/Credit	<u>t</u>	
I. Major	Course	es		
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	5			
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
MAC	142	Machine Applications II	2	6	4

## CADCAM Certificate (C50210D)

Title			Class/Lab/C	<u>redit</u>		
I. Major	Cours	es				
BPŔ	111	Print Reading	1	2	2	
MAC	141	Machine Applications I	2	6	4	
MAC	142	Machine Applications II	2	6	4	
II. Other	Major	Courses				
MAC	231	CNC Graphics Prog.: Turning	1	4	3	
MAC	232	CNC Graphics Prog: Milling	1	4	3	
Total Cre	dits: 1	6				
		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	-Sprin	g				
MAC	142	Machine Applications II	2	6	4	
MAC	232	CNC Graphics Prog: Milling	1	4	3	
		Manual Machi	ne Operator	(C50	0210M)	
Title			Class/Lab/C	<u>redit</u>		
I. Major	Cours	es				
BPR	111	Print Reading	1	2	2	
MAC	141	Machine Applications I	2	6	4	
MAC	142	Machine Applications II	2	6	4	
II. Other	Major	Courses				
MAC	121	Introduction to CNC	2	0	2	
MAC	151	Machine Calculations I	1	2	2	
MAC	152	Machine Calculations II	1	2	2	
MEC	142	Physical Metallurgy	1	2	2	
Total Cre	dits: 1	8				
		Recommend	ded Semester Se	chedi	ıle	
First Year	-Fall					
BPR	111	Print Reading	1	2	2	
		- 1	-	_	_	

MAC

MAC

MAC

MAC

MEC

First Year-Spring MAC

121

141

151

142

152

142

Introduction to CNC

Machine Applications I

Machine Calculations I

Machine Applications II

Machine Calculations II

Physical Metallurgy

2

2

1

6

6

2

2

4

4

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/C	redit	
I. Genera	l Educ	ation Courses			
COM	120	Interpersonal Communication	3	0	3
or		_			
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select o	ne cou	rse each from Humanities/Fine Arts and Soc	cial/Behavio	ral Sci	ences on page 76.
II. Majo	r Cours	ses			
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. Othe	r Majo	r Courses			
BUS	110	Introduction to Business	3	0	3
CIS	110	Introduction to Computers	4	0	3
COS	118	Salon IV	0	21	7
CTS	115	Information System Business Concepts	3	0	3
		-			
IV. Othe	r Requ	ired Courses			
ACA	115	Success and Study Skills	0	2	1
		·			

#### Recommended Semester Schedule

#### **DAY AND NIGHT CLASS**

**Total Credits: 66** 

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	5			
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	-Sumn	ner			
CIS	110	Introduction to Computers	4	0	3
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
Humai	nities El	ective-See list on page 75	3	0	3
Second Y	ear-Fal	l			
BUS	110	Introduction to Business	3	0	3
COS	117	Cosmetology Concepts IV	2	0	2
COS	118	Salon IV	0	21	7
Social	Science	es Elective-See list on page 75	3	0	3
Second Y	ear-Spr	ing			
COM or	120	Interpersonal Communication	3	0	3
COM	231	Public Speaking	3	0	3
CTS	115	Information Systems Business Concepts	3	0	3

## Cosmetology Diploma Program (D55140)

Title			Class/Lab/C	<u>Credit</u>			
I. Genera	I. General Education Courses						
ENG	101	Applied Communications I	3	0	3		
PSY	150	General Psychology	3	0	3		
II. Majo	r Cours	ses					
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. Othe	r Majo	r Courses					
COS	118	Salon IV	0	21	7		

**Total Credits: 47** 

### Recommended Semester Schedule

DAY AN	D NIG	HT CLASS			
First Year	r-Fall				
COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
PSY	150	General Psychology	3	0	3
T1. T7					
First Year	r-Spring	3			
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	-Sumn	ner			
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
Second Yo	ear-Fall	[			
COS	117	Cosmetology Concepts IV	2	0	2
COS	118	Salon IV	0	21	7

### Cosmetology Certificate Program (C55140)

Title		Class/Lab/Cre	<u>edit</u>				
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	117	Cosmetology Concepts IV	2	0	2		

**Total Credits: 34** 

### Recommended Semester Schedule

DAY AN	D NIG	HT CLASS			
First Year	r-Fall				
COS	111	Cosmetology Concepts I	4	0	4
COS	112	Salon I	0	24	8
First Year	r-Spring	5			
COS	113	Cosmetology Concepts II	4	0	4
COS	114	Salon II	0	24	8
First Year	r-Sumn	ner			
COS	115	Cosmetology Concepts III	4	0	4
COS	116	Salon III	0	12	4
Second Y	ear-Fall	1			
COS	117	Cosmetology Concepts IV	2	0	2

 $<sup>^{*}</sup>$ COS 117 and 118 are required for the State Board Certificate and the 1500 hour requirement.

## 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.

<u>Title</u>			Class/Lab/Cr	<u>edit</u>	
I. Major	Course	es			
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** 

Recommend	dod	Somestor	Sel	hod	ula
Necommend	ıeu	Semester	JUI	reai	uie

		Recommended Semes	ter Sci	reaule	e
Student St	arting	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 St	arting	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 St	arting	in Summer Semester:			
Summer	·				
COS	119A	Esthetics Concepts I A	1	0	1
COS		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

<sup>\*</sup>First 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.

<sup>\*\*</sup>Second 8 weeks only

# 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/C	<u>redit</u>		
I. Major	Course	es			
COS	121	Manicure/Nail Technology I	4	6	6
COS	222	Manicure/Nail Technology II	4	6	6
II. Other	Requi	red 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	3 0	3
CIS	110	Introduction to Computers	2	2 2	3
COS	121	Manicure/Nail Technology I	4	4 6	6
COS	2.2.2.	Manicure/Nail Technology II	2	1 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.

Class/Lab/Credit

<sup>\*</sup>This curriculum is offered on an individual basis in fall and spring semester, based on student demand and waiting list.

I. Major	Course	es			
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 C	redits:	24			
		Recommend	ed Semester S	chedu	le
First Year	-Fall, S	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					

Instructor Practicum II\*\*

COS

0

7

21

<sup>\*</sup>This curriculum is offered on an individual basis in fall or spring semesters, based on student demand.

<sup>\*\*</sup>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/C	<u>redit</u>		
	253	es Esthetics Instructor I Esthetics Instructor II	· ·	15 15	

**Total Credits: 22** 

#### Recommended Semester Schedule

Student St	tarting	in Fall Semester:			
Fall					
COS	253	Esthetics Instructor I	6	15	11
Spring					
COS	254	Esthetics Instructor II	6	15	11
Student St	tarting	in Spring Semester:			
Spring					
COS	253	Esthetics Instructor I	6	15	11
Summer					
COS	254A	Esthetics Instructor II A	3	8	6
Fall					
COS	254B	Esthetics Instructor II B	3	7	5

## 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

<u>Title</u>	Title Class/Lab/Credit								
I. Gen	I. General Education Courses								
COM	120	Interpersonal Communication	3	0	3				
or									
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	e each from Humanities/Fine Arts and Social/Be	ehavioral Scie	nces on	page				
76									
	jor Course								
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				
***	1 36.								
	her Major	Courses							
	groups:								
	hours fro		2	0	2				
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 3	6 hours fr	om.							
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				
		<del>-</del> <del>-</del> <del>-</del>							

ACA Total C	115 Credits: 7	Success and Study Skills 74	0	2	1
		Recommended S	Semester Schedule		
First Ye	ar-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 Ye	ar-Sprin	ng			
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 Ye	ar-Sum	mer			
COM	120	Interpersonal Communication	3	0	3
or					
COM	231	Public Speaking	3	0	3
CSC	121	Python Programming	2	3	3
Humar	ities Ele	ective	3	0	3
Social S	Science l	Elective	3	0	3
Second	Year-Fa	11			
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-Sp	oring			
DBA	120	Database Programming I	2	2	3
SEC	260	Security Administration II	2	2	3
Pick Tv	vo Cour	ses:			
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-Su	ımmer			
CCT	289	Capstone Project	1	6	3
CSC	151	Java Programming	2	3	3
ENG	111	Expository Writing	3	0	3
MAT	1.42	Ovantitativa Litara av	2	2	2

MAT 143

Quantitative Literacy

## Cyber Crime Technology Basic Certificate (C55210A)

Title			Clas	s/Lab/C	redit
I. Maj	or Course	s			
CCT	110	Intro to Cyber Crime	3	0	3
CCT	112	Ethics & High Technology	3	0	3
п ол		6			
CIS	her Major 110		2	0	2
		Introduction to Computers	3	0	3
CTS	120	Hardware/Software Support	2	3	3
DBA	110	Database Concepts Introduction to Networks	2	3	3
NET Total (	125 C <b>redits: 1</b> 8		1	4	3
Total	orcuits. It	,			
		Recommended Semester Schedule	e		
	ear 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 Y	ear Spring				
CCT	112	Ethics & High Technology	3	0	3
CTS	120	Hardware/Software Support	2	3	3
DBA	110	Database Concepts	2	3	3
		-			
C	yber Cri	me Technology Advanced Certificat	e (C5)	5210E	3)
	lyber Cri	me Technology Advanced Certificat	e (C5 <u>:</u>		
<u>Title</u>	lyber Cri	me Technology Advanced Certificat	e (C5 <u>:</u>	<b>5210E</b> Class/	
Title Credit		a ,	e (C5 <u>)</u>		
Title Credit I. Maj	Cyber Cri or Course	s	e (C5)		
Title Credit	or Course	a ,		Class/	<u>'Lab/</u>
Title Credit I. Maj CCT CCT	or Course 121 231	s Computer Crime Investigation Technology Crimes & Law	3	Class/	<u>'Lab/</u>
Title Credit I. Maj CCT CCT	or Course 121 231 her Major	s Computer Crime Investigation Technology Crimes & Law Courses	3 3	Class/	<u>'Lab/</u> 4 3
Title Credit I. Maj CCT CCT II. Otl CTS	or Course 121 231 her Major 115	S Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts	3 3	2 0	4 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC	or Course 121 231 her Major 115 151	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming	3 3 2	2 0 0	4 3 3
Title Credit I. Maj CCT CCT II. Otl CTS	or Course 121 231 her Major 115	S Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts	3 3	2 0	4 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB	or Course 121 231 her Major 115 151	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting	3 3 2	2 0 0	4 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB	or Course 121 231 her Major 115 151 115	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting	3 3 2 2	Class/ 2 0 0 3 2	4 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB	or Course 121 231 her Major 115 151 115	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting	3 3 2 2	Class/ 2 0 0 3 2	4 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB	or Course 121 231 her Major 115 151 115 Credits: 10	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting  Recommended Semester Sch	3 3 2 2	Class/ 2 0 0 3 2	4 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB Total C	or Course 121 231 her Major 115 151 115 Credits: 10	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting  Recommended Semester Sch	3 3 2 2 2	Class/ 2 0 0 3 2	4 3 3 3 3 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB Total C	or Course 121 231 her Major 115 151 115 Credits: 10 Year Fall 231	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting  Recommended Semester Sch	3 3 2 2 2	Class/ 2 0 0 3 2	4 3 3 3 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB Total C First Y CCT CTS WEB	or Course 121 231 her Major 115 151 115 Credits: 10 Year Fall 231 115 115	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting  Recommended Semester Sch  Technology Crimes & Law Info Systems Business Concepts Web Markup & Scripting	3 3 2 2 2 <b>bedule</b> 3 3 3	Class/ 2 0 0 3 2	4 3 3 3 3 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB Total C First Y CCT CTS WEB	or Course 121 231 her Major 115 151 115 Credits: 10  Year Fall 231 115 115	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting  Recommended Semester Sch  Technology Crimes & Law Info Systems Business Concepts Web Markup & Scripting	3 3 2 2 bedule 3 3 2	Class/ 2 0 0 3 2	4 3 3 3 3 3 3 3 3 3
Title Credit I. Maj CCT CCT II. Otl CTS CSC WEB Total C First Y CCT CTS WEB	or Course 121 231 her Major 115 151 115 Credits: 10 Year Fall 231 115 115	Computer Crime Investigation Technology Crimes & Law  Courses Info Systems Business Concepts JAVA Programming Web Markup & Scripting  Recommended Semester Sch  Technology Crimes & Law Info Systems Business Concepts Web Markup & Scripting	3 3 2 2 2 <b>bedule</b> 3 3 3	Class/ 2 0 0 3 2	4 3 3 3 3 3 3

# Teaching/Training: Early Childhood Education

A55220C (Associate Degree) D55220C (Diploma) C55220C (Certificate)

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

Class/Lab/Credit

11110			Class/ Lab/ C	ncare		
I. Genera	ıl Educ	ation Courses				
Take 2	Group	s:				
<u>Group</u>	<u>I:</u> Take	6 credits				
COM	231	Public Speaking	3	0	3	
ENG	111	Writing and Inquiry	3	0	3	
Group	II: (Tak	xe 3 credits from each)				
Humai	nities, S	ocial/Behavioral Science and Natural Science	e/Math (see	e list or	ı page 14	(8
II. Majo	r Cour	ses				
Take 35						
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. Othe	r Majo	<b>r Courses</b> (Must be selected from identified	prefixes)			
Take 1	-		1			
CIS	110	Intro. to Computers	2	2	3	
EDU		Math and Science Activities	3	0	3	
EDU	261	Early Childhood Administration I	3	0	3	

Title

PSY	150	General Psychology	3	0	3
EDU	271	Educational Technology	2	2	3
0.1					
	Major I credits	Requirements:			
			1	2	2
EDU	184	Early Childhood Practicum	1	3	2
IV. Oth	er Rea	uired Courses			
Take 1		uned Courses			
ACA	115	Success and Study Skills	0	2	1
ACA		•	0	2	1
		o .			
Total C	Credits:	68			
		Recommended Seme	ester S	chedi	ıle
First Year	. 17-11				
ACA	115	Success and Study Skills	0	2	1
or	113	Success and Study Skins	U	2	1
ACA	122	College Transfer Success	0	2	1
EDU	119	e e e e e e e e e e e e e e e e e e e	4	0	4
EDU	144		3	0	3
ENG	111	Expository Writing	3	0	3
		the Natural Science/Math pick list on page 146	3	0	3
Choose	c 11 0111 t	the Truturul Science, Truth pick list on page 110	3	O	3
First Year	-Spring				
EDU	145		3	0	3
EDU	146	1	3	0	3
	153		3	0	3
EDU	184	Early Childhood Practicum	1	3	2
Choose		Humanities/Fine Arts pick list on page 146	3	0	3
		1 1 0			
First Year	-Summ	ner			
CIS	110	Introduction to Computers	2	2	3
PSY	150	General Psychology	3	0	3
Second Y	ear-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	e from S	Social /Behavioral Science pick list on page 146	3	0	3
Second Y	ear-Spr	ing			
EDU	234	Infant, Toddler and Two's	3	0	3
EDU	271	Educational Technology *	2	2	3
		dd-numbered years only	-	-	-
EDU	280	Language & Literacy Experiences	3	0	3
EDU	284	Early Childhood Practicum	1	9	4
-		•			
Second Y	ear-Sur	nmer			
COM	231	Public Speaking	3	0	3
EDU	252	Math and Science Activities *	3	0	3
*00	Υ 1	11 1 1 1			

\*Offered odd-numbered years only

### Early Childhood Education Diploma Program (D55220C)

Title			Class/Lab/C	<u>redit</u>	
I. General	l Educ	ation Courses			
Take 2	groups				
Group 1					
COM	231	Public Speaking	3	0	3
ENG	111	Writing and Inquiry	3	0	3
Group 1	<u>II:</u> (Tak	ce 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
		·			
II. Major	Cours	ses			
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
		•			
III. Other	Majo	r Courses			
EDU	184	Early Childhood Practicuum	1	3	2
PSY	150	General Psychology	3	0	3
IV. Oth	er Req	uired Courses			
ACA	115	Success and Study Skills	0	2	1
or		·			
ACA	122	College Transfer Success	0	2	1
Total C	redits:	40			
		Recommended :	Semester Sc	hedi	ıle
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	Writing and Inquiry	3	0	3
PSY	150	General Psychology	3	0	3
		2		-	
First Year-	-Spring	o c			
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
220	101	Zari, Cintanova i racticum	1	-	_
Second Ye	ear-Fall	1			
EDU	131	Child, Family & Community	3	0	3
EDU	151	Creative Activities	3	0	3
	131		3	U	3

EDU Choos	221 e from l	Children With Exceptionalities Natural Science/Math pick list on page 76	3	0 0	3 3
		Early Childhood Education Certi	ificate	Prog	ram (C55220C)
Title			s/Lab/C		<i></i> (0)
I. Major	Course		.,,		
EDÚ	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. Othe	r Majoı	r Courses			
Total (	Credits:	16			
		Recommended Seme	ester S	Schedi	ıle
First Year	r-Fall				
EDU	119	Introduction to Early Childhood Education	4	0	4
EDU	131	Child, Family & Community	3	0	3
First Year	r-Sprine	or.			
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 Certific	ata Dv	oman	m (C55290)
Title			ss/Lab/		<i>i</i> (C))2/0)
I. Major	Course		.00/ <b>E</b> @0/	Greate	
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. Othe	r Majoı	r Courses			
Total (	Credits:	16			
		D 1.10			•
		Recommended Seme	ester S	chedi	ıle
First Year	r-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	r-Sprine	or			
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) Class/Lab/Credit

		<i>3</i>	J	0
Title			Class/Lab/Cred	<u>it</u>
I. Major	Course	es		
EDU	119	Introduction to Early Childhood Education	n 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	5			
EDU	153	Health, Safety, and Nutrition	3	0	3

**Total Credits: 16** 

## 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.

Class/Lab/Credit

I. Genera	d Educ	ation Courses				
Comm	unicati	ons:				
ENG	111	Writing and Inquiry		3	0	3
COM	231	Public Speaking		3	0	3
Human	nities: (	select one course)				
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
Social 1	Behavio	oral Science				
PSY	150	General Psychology		3	0	3
Mathe	matics:					
MAT	143	Quantitative Literacy		2	2	3
II. Maj	jor Cou	ırses				
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
Child I	Develo	oment:				
EDU	144	Child Development I		3	0	3
EDU	145	Child Development II		3	0	3
Additio	onal Ge	eneral Ed for Transfer Specialty:				
English	ı Comp	position				
ENG	112	Writing/Research in the Disciplines		3	0	3
Social/	Behavi	oral Science (select one course)				
ECO	251	Principles of Microeconomics		3	0	3
ECO	252	Principles of Macroeconomics		3	0	3
HIS	111	World Civilizations I		3	0	3
			141			

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
Biologic	al Scien	ace			
BIO	111	General Biology I	4	0	4
Natural Group I		(select one group)			
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		General Astronomy I Lab	1	0	1
Group 3 CHM	151	General Chemistry I	4	0	4
III. C	4 4	.: C	) I : /	Г.,,	·
EDU	216	cion Courses – Birth to Kindergarten (B-K Foundations of Education	3	1 <b>rans</b> 1 0	3
EDU	250	Teacher Licensure Preparation	3	0	3
LD C	200	reaction Electionic 1 reputation	J	Ü	
IV. Oth	er Requ	uired Courses			
ACA	122	College Transfer Success	1	0	1
Total: 71					
		Recommended S	Semester S	chedi	ıle
<b>T</b> 10 . <b>T</b> 7	E 11				
First Year		C-11 T	0	2	1
ACA EDU	122 119	College Transfer Success Introduction to Childhood Education	$0 \\ 4$	2	1 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		C In I			
BIO	111	General Biology I	4	0	4
First Year					
ENG	112	Writing/Research in the Disciplines	3	0	3
PSY	150	General Psychology	3	0	3
Second Y					
COM	231	Public Speaking	3	0	3
EDU		t had de lineagely Vy ( 'neangers mitry	2	()	3
EDII	131	Child, Family, & Community	3	0	3
EDU EDU	131 151 221	Creative Activities Children With Exceptionalities	3 3	0 0	3

EDU

EDU

Children With Exceptionalities

Foundations of Education

Second Y	ear-Spr	ing			
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
Choose	e from S	nmer Humanities/Fine Arts pick list on page 146 Social/Behavioral Science pick list on page 146 Natural Science picklist on page 146	3	0	3 3 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		
I. Genera	l Educ	ation Courses			
Comm	unicati	ions:			
ENG	111	Writing and Inquiry	3	0	3
COM	231	Public Speaking	3	0	3
Humar	nities: (	(select one course)			
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
Social 1	Behavi	oral Science			
PSY	150	General Psychology	3	0	3
Mathematics:					
MAT	143	Quantitative Literacy	2	2	3
II. Major	Cours	es			
EDÚ	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
Child I	Develo	pment:			
EDU	144	Child Development I	3	0	3
EDU	145	Child Development II	3	0	3
Additio	onal Ge	eneral Ed for Transfer Specialty:			
English	i Comp	position			
ENG	112	Writing/Research in the Disciplines	3	0	3
Social/Behavioral Science (select one course)					
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		World Civilizations II	3	0	3
HIS	131		3	0	3
HIS	132	•	3	0	3
POL	120	•	3	0	3
SOC	210	Introduction to Sociology	3	0	3
Biologi	cal Scie	nce			
BIO	111	General Biology I	4	0	4
NT .	10.				
		e (select one group)			
Group		Descriptive Astronomy	2	0	2
AST AST	111	Descriptive Astronomy	3 1	0	3 1
		Descriptive Astronomy Lab	1	U	1
Group AST	151	Canaral Astronomy I	3	0	3
AST		General Astronomy I General Astronomy I Lab	1	0	1
		General Astronomy I Lab	1	U	1
Group CHM	<b>J</b> 151	General Chemistry I	4	0	4
CITIVI	131	General Chemistry 1	-	U	7
III. Conc	entratio	on Courses – Early Education Non-Licensur	e Transfer		
EDU	261	Early Childhood Admin I	3	0	3
EDU	262	Early Childhood Admin II	3	0	3
		•			
V. Other	Require	ed Courses			
ACA	122	College Transfer Success	1	0	1
m 1					
Total 71					
		December de d'Se	aatau C	ماء ماء	.1.
		Recommended Se	mester S	chedi	ıle
First Year	-Fall	Recommended Se	mester S	chedi	ıle
First Year			<b>mester S</b> 0	chedi 2	ıle 1
	122	Recommended Second College Transfer Success Introduction to Childhood Education			
ACA	122	College Transfer Success Introduction to Childhood Education	0	2	1 4
ACA EDU	122 119	College Transfer Success Introduction to Childhood Education Child Development I	0 4	2 0	1
ACA EDU EDU	122 119 144	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing	0 4 3	2 0 0	1 4 3
ACA EDU EDU ENG	122 119 144 111	College Transfer Success Introduction to Childhood Education Child Development I	0 4 3 3	2 0 0 0	1 4 3 3
ACA EDU EDU ENG MAT	122 119 144 111	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing	0 4 3 3	2 0 0 0	1 4 3 3
ACA EDU EDU ENG MAT or BIO	122 119 144 111 143	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy General Biology I	0 4 3 3 2	2 0 0 0 2	1 4 3 3 3
ACA EDU EDU ENG MAT or BIO	122 119 144 111 143 111	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy General Biology I	0 4 3 3 2	2 0 0 0 2	1 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU	122 119 144 111 143 111 -Spring 145	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy General Biology I Child Development II	0 4 3 3 2 4	2 0 0 0 2 0	1 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU	122 119 144 111 143 111 -Spring 145 146	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy General Biology I Child Development II Child Guidance	0 4 3 3 2 4	2 0 0 0 2 0	1 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU EDU EDU	122 119 144 111 143 111 -Spring 145 146 153	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy General Biology I Child Development II Child Guidance Health, Safety, and Nutrition	0 4 3 3 2 4	2 0 0 0 2 0	1 4 3 3 3 4 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU EDU EDU MAT	122 119 144 111 143 111 -Spring 145 146	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy General Biology I Child Development II Child Guidance	0 4 3 3 2 4	2 0 0 0 2 0	1 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU EDU MAT or	122 119 144 111 143 111 -Spring 145 146 153 143	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy	0 4 3 3 2 4	2 0 0 2 0 0	1 4 3 3 3 4 4 3 3 3 3 3
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU EDU EDU MAT	122 119 144 111 143 111 -Spring 145 146 153	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy General Biology I Child Development II Child Guidance Health, Safety, and Nutrition	0 4 3 3 2 4	2 0 0 0 2 0	1 4 3 3 3 4 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU EDU MAT or BIO	122 119 144 111 143 111 -Spring 145 146 153 143	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I	0 4 3 3 2 4	2 0 0 2 0 0	1 4 3 3 3 4 4 3 3 3 3 3
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU EDU MAT or BIO  First Year	122 119 144 111 143 111 -Spring 145 146 153 143 111	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I	0 4 3 3 2 4 3 3 3 2 4	2 0 0 2 0 0 0 0 0 2 0	1 4 3 3 3 4 4 3 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU MAT or BIO  First Year EDU EDU MAT OR BIO	122 119 144 111 143 111 -Spring 145 146 153 143 111 -Summ 112	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I  er English Composition	0 4 3 3 2 4 3 3 3 2 4	2 0 0 0 2 0 0 0 0 0 2 0	1 4 3 3 3 4 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU MAT or BIO  First Year ENG COM	122 119 144 111 143 111 Spring 145 146 153 143 111 Summ 112 231	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I  er English Composition Public Speaking	0 4 3 3 2 4 3 3 3 2 4	2 0 0 0 2 0 0 0 0 2 0	1 4 3 3 3 4 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU MAT or BIO  First Year EDU EDU MAT OR BIO	122 119 144 111 143 111 -Spring 145 146 153 143 111 -Summ 112	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I  er English Composition	0 4 3 3 2 4 3 3 3 2 4	2 0 0 0 2 0 0 0 0 0 2 0	1 4 3 3 3 4 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU MAT or BIO  First Year ENG COM	122 119 144 111 143 111 -Spring 145 146 153 143 111 -Summ 112 231 150	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I  er English Composition Public Speaking General Psychology	0 4 3 3 2 4 3 3 3 2 4	2 0 0 0 2 0 0 0 0 2 0	1 4 3 3 3 4 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU MAT or BIO  First Year ENG COM PSY	122 119 144 111 143 111 -Spring 145 146 153 143 111 -Summ 112 231 150	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I  er English Composition Public Speaking General Psychology	0 4 3 3 2 4 3 3 3 2 4	2 0 0 0 2 0 0 0 0 2 0	1 4 3 3 3 4 4 3 3 3 4
ACA EDU EDU ENG MAT or BIO  First Year EDU EDU MAT or BIO  First Year ENG COM PSY  Second Year	122 119 144 111 143 111 -Spring 145 146 153 143 111 -Summ 112 231 150	College Transfer Success Introduction to Childhood Education Child Development I Expository Writing Quantitative Literacy  General Biology I  Child Development II Child Guidance Health, Safety, and Nutrition Quantitative Literacy  General Biology I  er English Composition Public Speaking General Psychology	0 4 3 3 2 4 3 3 3 2 4	2 0 0 0 2 0 0 0 2 0	1 4 3 3 3 4 4 3 3 3 3 3 3

EDU

221

Children With Exceptionalities

3

3

EDU	261	Early Childhood Admin. I	3	0	3
EDU	262	Early Childhood Admin. II	3	0	3
Second Y	ear-Spr	ring			
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 N	latural Science pick list on page 146			4
Second Y	ear-Sur	nmer			
Choose	e from 1	Humanities/Fine Arts pick list on page 146	3	0	3
Choose from Social/Behavioral Science pick list on page 146			3	0	3

# **Early Childhood Education 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/B	ehavior	al 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
NT = 44 1	Catama	e/Mathematics Pick List			
			2	2	4
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/C	<u>redit</u>	
I. Genera	l Educ	ation Requirements. 45 shc required			
English (	Compos	sition (6 semester hours)			
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanit	ies/Co	mmunications (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/Be	havior	al Sciences (6 semester hours)			
		es from the following from at least two diffe	erent discipli	ies:	
ECO	251	Principles of Microeconomics	3	0	3
or		1			
ECO	252	Principles of Macroeconomics	3	0	3
HIS	111	World Civilizations I	3	0	3
or	111	World Civilizations 1	3	U	3
HIS	112	World Civilizations II	3	0	3
HIS or	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 (3-4	4 seme	ster hours)			
Select one	cours	e 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 S	cience	(4 semester hours)			
Select one	cours	e 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

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

<sup>\*</sup>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

## **Total Credits: 60-61**

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	cours	e from the following:			
MAT	143	Quantitative Literacy	2	2	3
MAT`	152	Statistical Methods	3	2	4
MAT	171	Precalculus Algebra	3	2	4
Genera	l Educa	ation Elective	3	0	3
First Year	-Spring	9			
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
Genera	al Educ	ation Elective	3	0	3
Humar	nities/F	ine Arts Elective	3	0	3
Social	Science	Elective	3	0	3
First Year	r-Sumn	ner			
Humar	nities/F	ine Arts Elective	3	0	3
Social	Science	Elective	3	0	3
Second Y	ear-Fal	1			
BIO	111	General Biology I	3	3	4
SOC	225	Social Diversity	3	0	3
EDU	216	Foundations of Education	3	0	3
Genera	al Educ	ation Elective	3	0	3
Second Y	ear-Spr	ring			
EDU	250	Teacher Licensure Preparation	3	0	3
EDU	279	Literacy Development and Instruction	3	3	4
Genera	al Educ	ation Elective	3	0	3
Genera	al Educ	ation 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/Cr	<u>edit</u>	
I. Genera	l Educ	ation Requirements. 45 shc required			
English C	Compos	sition (6 semester hours)			
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humaniti	ies/Co	mmunications (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/Be	havior	al 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)

CHM

CHM

and

151

152

Select two	o cours	es 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 S	Science	(8 semester hours)			
Select two	o cours	es from the following:			
BIO	111	General Biology I	3	3	4
and					
BIO	112	General Biology II	3	3	4
or					

### II Additional General Education (17-18 semester hours credit required)

## Other Required General Education (3 semester hours)

General Chemistry I

General Chemistry II

SOC 225 Social Diversity 3 0 3

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.

3

4

3

# 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

<sup>\*</sup>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

## **Total Credits: 60-61**

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) C35130A (Certificate) C35130B (Certificate) This curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/

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/Cr				edit				
I. General	I. General Education Courses							
COM	120	Interpersonal Communications	3	0	3			
or								
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.								

<sup>\*</sup>Students planning to pursue a Bachelor's degree should take MAT 171, 171A, MAT 172, MAT 172A and MAT 271.

II. Major	Course	es			
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. Conce	entratio	on.			
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			
Take 8 cre	dits				
EGR	125	Applied Software for Technology	1	2	2
ISC	112	Industrial Safety	2	0	2
PCI	264	Process Control 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

Work-Based Learning III

Work-Based Learning III

WBL

WBL

131

132

1

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
Take 15 c	redits				
ELN	133	Digital Electronics	3	3	4
ELN	233	Microprocessor Fundamentals	3	3	4
HYD	110	Hydraulics/Pneumatics I	2	3	3
PHY	131	Physics-Mechanics	3	2	4
V. Other	Requi	red Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1

**Total Credits: 67** 

T10 . T7	T. 11				
First Year-		0 10 1 01:11	0	2	
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		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	120	Interpersonal Communications	3	0	3
or		1			
COM	231	Public Speaking	3	0	3
ELC	128	1 0	2	3	3
ELN	231	Industrial Controls	2	3	3
ENG		Writing and Inquiry	3	0	3
First Year-	Summ	er			
MAT	121	Algebra/Trigonometry I	2	2	3
Human		A Elective-See list on page 76	3	0	3
		Elective-See list on page 76	3	0	3
Second Ye	ar-Fall				
ELC	113	Residential Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
		NEC Calculations	1	2	2
ELC		Instrumentation	3	2	4
PCI	264	Process Control with PLC's	3	3	4
rCi	204	Frocess Control with FLC's	3	3	4
Second Ye					
ACA	220		1	0	1
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

	Electrical Systems Technology Diploma Program (D35130)
Title	Class/Lab/Credit

I. General	Educa	tion Courses	Glassy Easy Ci	care	
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3
II. Major	Course	es			
ELC	113	Residential Wiring	2	6	4
ELC		Introduction to PLC	2	3	3
ELC		Circuit Analysis I	3	3	4
ELC		Circuit Analysis I Lab	0	3	1
ELN		Industrial Controls	2	3	3
III. Conce	entratio	on			
ELC	115	Industrial Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
IV. Other	Maior	Courses			
Take 4 cre					
EGR	125	Applied Software for Technology	1	2	2
ISC	112	Industrial Safety	2	0	2
WBL		Work-Based Learning I	0	0	1
WBL		Work-Based Learning I	0	0	2
WBL		Work-Based Learning II	0	0	1
WBL		Work-Based Learning II	0	0	2
WBL		Work-Based Learning III	0	0	1
WBL		Work-Based Learning III	0	0	2
WBL		Work-Based Learning IV	0	0	1
WBL		Work-Based Learning IV	0	0	2
Take 4 cre	dits				
ELN	133	Digital Electronics	3	3	4
V. Other I	Require	ed Courses			
ACA	115		0	2	1
ACA	220	Professional Transition	1	0	1
Total C	redits:	37			
		Recommended S	emester Sc	hedi	ule
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	-Summ	er			
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3
Second Y	ear-Fall				
ACA	220	Professional Transition	1	0	1
ELC		Residential Wiring	2	6	4
ELC		Circuit Analysis I	3	3	4
ELC	131A	Circuit Analysis I Lab	0	3	1
		Electrical Systems Technology	•	_	n (C35130A) Level I
<u>Title</u>			Class/Lab/C	<u>Credit</u>	
I. Major					
ELC	113	Residential Wiring	2	6	4
ELC	115	e	2	6	4
ELC		National Electric Code	1	2	2
ELC	128	Introduction to PLC	2	3	3
1	1				
Total cred	lits: 13				
		Recommend	led Semester S	chedu	ıle
First Yea					
ELC	113	Residential Wiring	2	6	4
ELC	118	National Electric Code	1	2	2
T10 T7					
First Year			2		4
ELC	115	Industrial Wiring	2	6	4
ELC	128	Introduction to PLC	2	3	3
			CC . D		(C25120D) I III
		Electrical Systems Technology	•	_	i (C35130B) Level II
<u>Title</u>			Class/Lab/C	<u>Credit</u>	
I. Major			2	_	4
ELC	113	Residential Wiring	2	6	4
ELC		ĕ	2	6	4
ELC			1 2	2	2
ELC	128	Introduction to PLC	3	3	3
ELC	131	•	0	3	4
ELC	131A	Circuit Analysis I Lab	U	3	1
Total cred	lite 19				
Total Cico	1113. 10	<b>D</b>	I. I C	.1 1.	.1.
		Recommena	led Semester S	cneau	ue
First Year	E-11				
ELC		Davidantial Wining	2	6	4
ELC	113	Residential Wiring National Electric Code	2 1	6 2	4
ELC	118		3	3	2
ELC	131	Circuit Analysis I	0	3	4 1
ELC	131A	Circuit Analysis I Lab	U	3	1
First Year	-Sneina				
ELC	- <b>Spring</b> 115	Industrial Wiring	2	6	4
ELC	128	Introduction to PLC	2	3	3
LLC	120	Incoduction to 1 LO	4	5	<i>5</i>

# **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	s/Lab/0	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

Requi	red Course	es (27 Hours)			
EPT	Γ 120	Sociology of Disaster	3	0	3
EPT	130	Mitigation & Preparedness	3	0	3
EPT	$\Gamma$ 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
Inci	dent Mana	agement.			
EPT	Γ 150	Incident Management	3	0	3
Law	and Ethic	SS.			
EPT	Γ 124	EM Services Law & Ethics	3	0	3

## III. Other Major Hours

Take 27 hours from the following list (with no more than 9 hours per prefix): BUS Principles of Supervision 3 2. 2. 3 CIS 110 Introduction to Computers CIC 111 Intro to Criminal Justice CJC 3 3 112 Criminology CJC 120 Interviews/Interrogations 3 CJC 121 Law Enforcement Operations CIC 122 Community Policing 3 3 Criminal Law 3 CJC 131 CJC 132 Court Procedure & Evidence 3 CJC 141 Corrections 3 3 CJC 3 3 160 Terrorism: Underlying Issues

CJC	161	Intro to Homeland Security	3	0	3
CJC	212	Ethics & Comm Relations	3	0	3
ĆĴĆ	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 Goverment	3	0	3
IV. Other	r Reaui	red 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
Т. 16	5. 19.	71			
10tai C	Credits:	Recommended	I Samastan S	chada	ıla
		1000000000			
First Year	-Fall	Recommended			
First Year	- <b>Fall</b> 115	Success & Study Skills	0	2	1
ACA					
ACA or	115	Success & Study Skills	0	2	1 1 3
ACA or ACA	<ul><li>115</li><li>122</li></ul>	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry	0	2	1 3 3
ACA or ACA CIS	115 122 110	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster	0 0 2 3 3	2 2 2 0 0	1 1 3 3 3
ACA or ACA CIS ENG	115 122 110 111	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry	0 0 2 3	2 2 2 0	1 3 3 3 3
ACA or ACA CIS ENG EPT	115 122 110 111 120	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster	0 0 2 3 3	2 2 2 0 0	1 1 3 3 3
ACA or ACA CIS ENG EPT EPT FIP	115 122 110 111 120 140 120	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection	0 0 2 3 3 3	2 2 2 0 0	1 3 3 3 3
ACA or ACA CIS ENG EPT EPT FIP	115  122 110 111 120 140 120 Spring	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection	0 0 2 3 3 3 3 3	2 2 2 0 0 0	1 3 3 3 3 3
ACA or ACA CIS ENG EPT EPT FIP  First Year COM	115  122 110 111 120 140 120 Spring 231	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection	0 0 2 3 3 3 3 3	2 2 2 0 0 0 0	1 1 3 3 3 3 3 3 3 3
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT	115  122 110 111 120 140 120 Spring 231 130	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  Public Speaking Mitigation & Preparedness	0 0 2 3 3 3 3 3	2 2 2 0 0 0	1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT	115  122 110 111 120 140 120 Spring 231 130 150	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection	0 0 2 3 3 3 3 3	2 2 2 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS	0 0 2 3 3 3 3 3	2 2 2 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS	0 0 2 3 3 3 3 3 3	2 2 2 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose First Year ACA	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition	0 0 2 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT	115  122 110 111 120 140 120  -Spring 231 130 150 e 6 cred  -Sumn 220 143	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy	0 0 2 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred Sumn 220 143 210	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy Introduction to Sociology	0 0 2 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred Sumn 220 143 210	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy	0 0 2 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC	115  122 110 111 120 140 120 Spring 231 130 150 e 6 credSumm 220 143 210 nities E	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy Introduction to Sociology lective-see list on page 75	0 0 2 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC Human	115  122 110 111 120 140 120 Spring 231 130 150 e 6 credSumm 220 143 210 nities E	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy Introduction to Sociology lective-see list on page 75	0 0 2 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC Human	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred Sumn 220 143 210 nities E	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy Introduction to Sociology lective-see list on page 75	0 0 2 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC Human  Second Y EPT	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred Sumn 220 143 210 nities E	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy Introduction to Sociology lective-see list on page 75  1 EM Services Law & Ethics	0 0 2 3 3 3 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 6 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC Human  Second Y EPT EPT	115  122 110 111 120 140 120 Spring 231 130 150 e 6 cred Sumn 220 143 210 nities E  fear-Fal 124 210	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  g Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy Introduction to Sociology lective-see list on page 75  1 EM Services Law & Ethics Response & Recovery	0 0 2 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 6 6
ACA or ACA CIS ENG EPT EPT FIP  First Year COM EPT EPT Choose  First Year ACA MAT SOC Human  Second Y EPT EPT EPT EPT	115  122 110 111 120 140 120  -Spring 231 130 150 - Gered -Summ 220 143 210 nities E	Success & Study Skills  College Transfer Success Introduction to Computers Writing and Inquiry Sociology of Disaster Emergency Management Intro to Fire Protection  Public Speaking Mitigation & Preparedness Incident Management lits from CJC, FIP, EPT, EMS, BUS  ner Professional Transition Quantitative Literacy Introduction to Sociology lective-see list on page 75  EM Services Law & Ethics Response & Recovery Terrorism & Emer. Mgt	0 0 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 3 3 3 3 3 3 3 3 6 6

# **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
01	_ 1	II. C. OLO PID PDE DAG DILO			

Choose 6 credits from CJC, FIP, EPT, EMS, BUS

# Emergency Management-Criminal Justice Certificate (C55460C)

Title	le Class/Lab/C			<u>redit</u>	
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

**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	9				
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)

<u>Title</u>			Class/	Lab/C	redit
I. Major	Course	s			
EPT	130	Mitigation & Preparedness	3	0	3
EPT	140	Emergency Management	3	0	3
II. Other EMS	<b>Major</b> 110	Courses EMT	6	6	9
	-	red Courses			
ACA	115	Success & Study Skills	0	2	1

**Total Credits: 16** 

		Recommended	Semester Se	chedi	ıle
First Year-	-Fall				
ACA	115	Success & Study Skills	0	2	1
EMS	110A	AB EMT (Emerg. Med. Technician)			4
EPT	130	Mitigation & Preparedness	3	0	3
EPT	140	Emergency Management	3	0	3
First Year-	-Spring	95			
EMS	110A	B EMT (Emerg. Med. Technician)			5

# Emergency Management-Fire Technology Certificate (C55460F)

<u>Title</u> Cla					Lab/Credit
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	228	Local Government Finance	3	0	3
	_				
II. Other Required Courses					
ACA	115	Success & Study Skills	0	2	1

**Total Credits: 13** 

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	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.

I. Genera	l 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				
EMS-110	EMT	6	6	3	9
BIO-169	Anatomy & Physiology II	3	3	0	4
III. Require	ed 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
IV. Other N	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
V. Other F	Required Courses				
ACA-115	Success and Study Skills	0	2	0	1
ACA-113	Success and Study Skins	U	4	U	1

Total Credits: 74

First Year Fall					
ACA 115	Success and Study Skills	0	2	0	1
BIO-168	Anatomy & Physiology I	3	3	0	4
EMS-110	EMT	6	6	3	9
MED 121	Medical Terminology 1	3	0	0	3
111111111111111111111111111111111111111	Medical Terminology 1		Ü	O	J
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
	67				
First Year Summe	er				
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 Spri					
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	(C453	340)	
	gj	- January - Landau -	( > c	/	
I. Major C	Courses				
EMS-110	EMT	6	6	3	9
	lajor 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 Seme	otan Sahada	,la		
First Year Fall	Necommenaea Seme	sier schieat	iie		
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
110/11/11/	ouccess and study ordino	V	4	U	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. Genera	l 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-150General Psychology or SOC-210 Introduction to Sociology

II. M	ajor Courses				
BIO-169 Ar	3	3	0	4	
III. Ot	ther 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

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 Elec	tive: 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	Compos	sition				
ENG	111	Writing and Inquiry	3	0	3	
ENG	112	Writing/Research in the Disciplines	3	0	3	
Human	ities: Ch	noose 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 Ar	ts and Co	ommunications: Choose One				
COM	231	Public Speaking	3	0	3	
ART	111	Art Appreciation	3	0	3	
MUS	110	Music Appreciation	3	0	3	
Social/l	Behaviora	al Sciences				
ECO	251	Principles of Microeconomics	3	0	3	
	Choose	•				
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	
Mathen	natics					
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
	_	UIRED HOURS (15-16 SHC)			
Local N	ATCC F	Requirements (5 semester hours)			
Must b	e compl	eted 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 Ye	ar-Sprii	ng					
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		
EGR PED	150 110		1	2 2	2 2		
PED	110	Introduction to Engineering	1	_	_		

Year-Fa	·II				
273	Calculus III	3	2	4	
251 General Physics I 3 3					
Engineering Pre-Major Elective				3 or 4	
Humanities Requirement 3 0			0	3	
General Education Requirement				3 or 4	
Year-Sp	oring				
Year-Sp 252	oring General Physics II	3	3	4	
252	C	3 3	3 0	4 3	
252 cience l	General Physics II	·	-	=	
	273 251 ering Pr ities Re	273 Calculus III 251 General Physics I ering Pre-Major Elective ities Requirement	273 Calculus III 3 251 General Physics I 3 ering Pre-Major Elective ities Requirement 3	273 Calculus III 3 2 251 General Physics I 3 3 ering Pre-Major Elective ities Requirement 3 0	

# **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/Cr	<u>edit</u>	
I. Genera	al Educ	ation Courses 15 shc required			
English (	Compos	sition 6 shc			
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humani	ties/Fin	e 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/Bo	ehavior	al 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 S	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		
** 11/01							
Health/Ph	•		2	0	2		
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		
Humaniti	os/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 Graphic Design  Introduction to Communications	3	0	3		
COM	120		3	0	3		
COM	231	Intro. to Interpersonal Communications	3	0	3		
DRA	111	Public Speaking Theatre Appreciation	3	0	3		
DRA	126	Theatre Appreciation	3	0	3		
ENG	231	Storytelling American Literature I	3	0	3		
			3		3		
ENG	232 241	American Literature II	3	0	3		
ENG	241	British Literature I		0	3		
ENG		British Literature II	3	0			
ENG	273	African-American Literature	3	0	3		
FRE	111	Elementary French I*	3	0	3		
FRE	112	Elementary French II*		0			
HUM	110	Technology and Society	3	0	3		
HUM	115	Critical Thinking	3	0			
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/Bel					
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 So	cience				
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		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		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
_		•		•	
Mathemat	tics				
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.

<u>Title</u>			Class/Lab/C	<u>redit</u>	
I. Genera	l Educ	ation Courses 15 shc required			
English C	Compo	sition (6 semester hours)			
ENG	111	Writing and Inquiry	3	0	3
ENG	112	Writing/Research in the Disciplines	3	0	3
Humanit	ies/Co	mmunications (9 semester hours)			
Take 6	credits	1			
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
		al Sciences (9 semester hours)			
Take 9					
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	credite				
HIS	111	World Civilizations I	3	0	2
_		World Civilizations II			3
HIS	112		3	0	3
HIS	131	American History I	3	0	3
HIS	132	American History II	3	0	3
Natural S	cience				
Take 8					
BIO	168	Anatomy and Physiology	3	3	4
BIO	169	Anatomy and Physiology	3	3	4
DIO	107	Anatomy and mysiology	3	3	1
Take 3	credits				
BIO	175	General Microbiology	2	2	3
BIO	275	Microbiology	3	3	4
T 1 1	62 C				
Take 1		=	2	3	4
CHM	151	General Chemistry I	3	3	4
or CHM	131	Introduction to Chemistry	3	0	3
CHM		Introduction to Chemistry Lab	0	3	1
0111.1	10111	initio unction to one initially suc	Ü		-
Math					
Take 4	credits				
MAT	152	Statistical Methods I	3	2	4
Take 3				_	_
MAT	143	Quantitative Literacy	2	2	3
MAT	171	Pre-Calculus	3	2	4
II Other	Requir	ed Courses			
	_	red Courses College Transfer Success	0	2	1
II. Other ACA	Requir 122	red Courses  College Transfer Success	0	2	1
ACA	122		0	2	1
ACA	122 ional G	College Transfer Success	0	2	1
ACA  III. Addit  Take 7	122 ional G	College Transfer Success Seneral Education			
ACA  III. Addit  Take 7	122 ional G credits	College Transfer Success  General Education  Art Appreciation	3	0	3
ACA  III. Addit  Take 7	122 ional G credits  111 151	College Transfer Success  General Education  Art Appreciation  General Astronomy I	3 3	0 0	3 3
ACA  III. Addit  Take 7  ART  AST  AST	122 ional G credits 111 151 151A	College Transfer Success  General Education  Art Appreciation  General Astronomy I  General Astronomy I Lab	3 3 0	0 0 2	3
ACA  III. Addit  Take 7	122 ional G credits  111 151	College Transfer Success  General Education  Art Appreciation  General Astronomy I	3 3	0 0	3 3
ACA  III. Addit  Take 7  ART  AST  AST	122 ional G credits 111 151 151A 152	College Transfer Success  General Education  Art Appreciation  General Astronomy I  General Astronomy I Lab	3 3 0	0 0 2	3 3 1
ACA  III. Addit  Take 7 of  ART  AST  AST  AST	122 ional G credits 111 151 151A 152	College Transfer Success  General Education  Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II	3 3 0 3	0 0 2 0	3 3 1 3
ACA  III. Addit  Take 7 of  ART  AST  AST  AST  AST  AST	122 ional G credits 111 151 151A 152 152A	College Transfer Success  General Education  Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II Lab	3 3 0 3 0	0 0 2 0 2	3 3 1 3 1
ACA  III. Addit Take 7 of  ART AST AST AST AST BIO BIO	122 ional G credits 111 151 151A 152 152A 111 112	College Transfer Success  General Education  Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II Lab General Biology I General Biology II	3 3 0 3 0 3	0 0 2 0 2 3	3 3 1 3 1 4 4
ACA  III. Addit  Take 7 of  ART  AST  AST  AST  AST  BIO  BIO  CHM	122 ional G credits 111 151 151A 152 152A 111 112 131	College Transfer Success  General Education  Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Biology I General Biology II Introduction to Chemistry	3 3 0 3 0 3 3 3 3	0 0 2 0 2 3 3 0	3 3 1 3 1 4
ACA  III. Addit  Take 7 of  ART  AST  AST  AST  AST  BIO  BIO  CHM  CHM	122 ional G credits 111 151 151A 152 152A 111 112 131 131A	Art Appreciation General Astronomy I General Astronomy II General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology II Introduction to Chemistry Introduction to Chemistry Lab	3 3 0 3 0 3 3 3 3	0 0 2 0 2 3 3 0 3	3 3 1 3 1 4 4 3 1
ACA  III. Addit  Take 7 of  ART  AST  AST  AST  AST  BIO  BIO  CHM  CHM  CHM  CHM	122 ional G credits 111 151 151A 152 152A 111 112 131 131A 132	Art Appreciation General Astronomy I General Astronomy II General Astronomy II General Astronomy II General Astronomy II General Biology II General Biology II Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry	3 3 0 3 0 3 3 3 0 3	0 0 2 0 2 3 3 0 3 3	3 3 1 3 1 4 4 3 1 4
ACA  III. Addit  Take 7 of  ART  AST  AST  AST  AST  BIO  BIO  CHM  CHM  CHM  CHM  CHM	122 ional G credits 111 151 151A 152 152A 111 112 131 131A 132 151	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I	3 3 0 3 0 3 3 3 0 3 3 3	0 0 2 0 2 3 3 0 3 3 3	3 3 1 3 1 4 4 3 1 4 4 4 4
ACA  III. Addit  Take 7 of  ART  AST  AST  AST  AST  BIO  BIO  CHM  CHM  CHM  CHM  CHM  CHM	122 ional G credits 111 151 151A 152 152A 111 112 131 131A 132 151 152	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II	3 3 0 3 0 3 3 3 0 3 3 3 3 3	0 0 2 0 2 3 3 0 3 3 3 3 3	3 3 1 3 1 4 4 3 1 4 4 4 4 4
ACA  III. Addit Take 7 of the ART AST AST AST AST BIO BIO CHM	122 ional G credits 111 151 151A 152 152A 111 112 131 131A 132 151 152 110	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II Lab General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers	3 0 3 0 3 3 3 0 3 3 3 3 2	0 0 2 0 2 3 3 0 3 3 3 3 3 2	3 3 1 3 1 4 4 3 1 4 4 4 4 3 1
ACA  III. Addit  Take 7 of the second	122 ional G credits 111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II Lab General Astronomy II Lab General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic	3 3 0 3 0 3 3 3 0 3 3 3 3 2 2	0 0 2 0 2 3 3 0 3 3 3 3 3 2 3	3 3 1 3 1 4 4 4 3 1 4 4 4 4 3 3 3 3 3
ACA  III. Addit  Take 7 of the second	122 ional G credits 111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115 110	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic Introduction to Communication	3 3 0 3 0 3 3 3 0 3 3 3 2 2 3	0 0 2 0 2 3 3 0 3 3 3 3 3 2 3 0	3 3 1 3 1 4 4 4 4 4 4 4 3 3 3 3 3 3 3 3
ACA  III. Addit  Take 7 of the second	122  ional G credits  111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115 110 120	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic Introduction to Communication Introduction to Interpersonal Communication	3 3 0 3 0 3 3 3 0 3 3 3 2 2 2 3 3	0 0 2 0 2 3 3 0 3 3 3 3 2 3 0 0	3 3 1 3 1 4 4 4 4 3 1 4 4 4 4 3 3 3 3 3
ACA  III. Addit  Take 7 of the second	122  ional G credits  111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115 110 120 231	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Introduction to Chemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic Introduction to Communication Introduction to Interpersonal Communication Public Speaking	3 3 0 3 0 3 3 3 0 3 3 3 2 2 2 3 3 3	0 0 2 0 2 3 3 0 3 3 3 3 2 3 0 0 0	3 3 1 3 1 4 4 4 3 1 4 4 4 3 3 3 3 3 3 3
ACA  III. Addit  Take 7 of the second	122 ional G credits  111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115 110 120 231 111	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Astronomy II Lab General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic Introduction to Communication Introduction to Interpersonal Communication Public Speaking Theatre Appreciation	3 3 0 3 0 3 3 3 0 3 3 3 2 2 2 3 3 3 3	0 0 2 0 2 3 3 0 3 3 3 3 2 3 0 0 0 0 0 0	3 3 1 3 1 4 4 3 1 4 4 4 3 3 3 3 3 3 3 3
ACA  III. Addit Take 7 of the ART AST AST AST AST BIO BIO CHM CHM CHM CHM CHM CHM COM COM COM COM COM COM COM COM COM CO	122 ional G credits  111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115 110 120 231 111 126	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic Introduction to Programming and Logic Introduction to Interpersonal Communication Public Speaking Theatre Appreciation Storytelling	3 3 0 3 0 3 3 3 3 3 2 2 2 3 3 3 3 3 3	0 0 2 0 2 3 3 0 3 3 3 2 3 0 0 0 0 0 0 0	3 3 1 3 1 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3
ACA  III. Addit Take 7 of the ART AST AST AST AST BIO BIO CHM CHM CHM CHM CHM CHM CHM CIS CIS COM COM COM DRA DRA ECO	122 ional G credits  111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115 110 120 231 111 126 251	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Astronomy II Lab General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic Introduction to Programming and Logic Introduction to Interpersonal Communication Public Speaking Theatre Appreciation Storytelling Principles of Microeconomics	3 3 0 3 0 3 3 3 3 3 2 2 2 3 3 3 3 3 3 3	0 0 2 0 2 3 3 0 3 3 3 3 2 3 0 0 0 0 0 0	3 3 1 3 1 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3
ACA  III. Addit Take 7 of the ART AST AST AST AST BIO BIO CHM CHM CHM CHM CHM CHM COM COM COM COM COM COM COM COM COM CO	122 ional G credits  111 151 151A 152 152A 111 112 131 131A 132 151 152 110 115 110 120 231 111 126	Art Appreciation General Astronomy I General Astronomy I Lab General Astronomy II General Astronomy II General Astronomy II General Astronomy II General Biology I General Biology I Introduction to Chemistry Introduction to Chemistry Introduction to Chemistry Lab Organic and Biochemistry General Chemistry I General Chemistry II Introduction to Computers Introduction to Programming and Logic Introduction to Programming and Logic Introduction to Interpersonal Communication Public Speaking Theatre Appreciation Storytelling	3 3 0 3 0 3 3 3 3 3 2 2 2 3 3 3 3 3 3	0 0 2 0 2 3 3 0 3 3 3 2 3 0 0 0 0 0 0 0	3 3 1 3 1 4 4 3 3 3 3 3 3 3 3 3 3 3 3 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

# General Education Requirements:

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	Introd. 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
		177	

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
		, 178	

ASL	112	Elementary ASL II	3
ASL		ASL Lab I	1
ASL		ASL Lab II	1
AST	151	7	3
AST		General Astronomy I Lab	1
AST	152	General Astronomy II	3
AST		General Astronomy II Lab	1
ATR	112	Intro. to Automation	3
ATR	212	Industrial Robots	3
ATT	115	Green Trans Safety & Service	2
ATT	125	Hybrid-Electric Trans	4
ATT	140	Emerging Transp Tech	3
AUT	113	Automotive Servicing I	2
AUT	116	Engine Repair	3
AUT		Engine Repair Lab	1
AUT	141	Suspension and Steering Systems	3
AUT		Suspension and Steering Systems Lab	1
AUT	151	Brake Systems	3
AUT		Brake Systems Lab	1
AUT	161	Basic Auto Electricity	5
AUT	181	Engine Performance I	3
AUT		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		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		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		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	110	Basic Law Enforcement Training	20
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	Introducation 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	145	Child Guidance		3
EDU	151	Creative Activities		3
EDU	153			3
EDU	161	Health, Safety and Nutrition Intro to Exceptional Children		3
EDU	163	Classroom Management and Instruction		3
EDU	175	Introduction to Trade and Industry		3
		Instructional Methods		3
EDU	177			3
EDU	179	Vocational Student Organizations		2
EDU EDU	184	Early Childhood Intro Practicum		4
	187 216	Teaching and Learning for All Foundations of Education		
EDU	210			4
EDU EDU	221	Children with Exceptional Learn w/ Behavioral Disorders		3
				3
EDU	223	Specific Learning Disabilities		
EDU	234	Infants, Toddlers and Twos		3
EDU	235	School-Age Dev and Program		3
EDU	243	Infants, Toddlers and Twos		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	101	3

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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		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
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
<b>EMS</b>	221	EMS Clinical Practicum II		2
EMS	231	EMS Clinical Practicum III		3
EMS	235	EMS Management		2
<b>EMS</b>	240	Patients with Special Challenges		2
<b>EMS</b>	241	EMS Clinical Practicum IV		4
<b>EMS</b>	250	Medical Emergencies		4
<b>EMS</b>	260	Trauma Emergencies		2
<b>EMS</b>	270	Lifespan Emergencies		4
<b>EMS</b>	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	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
		- '		3
EPT EDT	<ul><li>220</li><li>275</li></ul>	Terrorism & Emer. Mgt		3
EPT	110	Emergency OPS Center Mgt Fire Prot/Rest & Hotels		3 1
FIP				
FIP	120	Intro to Fire Protection		3
FIP	124	Fire Prevention & Public Ed		3
FIP	132	Building Construction		3
FIP	146	Fire Protection Systems	102	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	131	American History II		3
HMT	110	Intro to Healthcare Mgt.		3
НМТ	210	Medical Insurance		3
HMT	211	Longterm Care Admin.		3
1 11/1 1	411	Longuin Care Admin.	183	5

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
LDD	112	Intro to Light Duty Diesel		3
LDD	181	LDD Fuel System		4
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	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
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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
NAS	103	Home Health Care Nurse Aide	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	236	Adv Word/Information Processing	3
OST	244	Medical Document Production	2
OST	247	Procedure Coding	2
OST	248	Diagnostic Coding	2
OST	249	Medical Coding Certification Prep	3
OST	250	Long-Term Care Coding	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		1
PED	152	Swimming-Beginning 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
РНО	226	Portraiture		4
PHO	235	Commercial Photography		4
PHY	110	Conceptual Physics		3
PHY	110A	- '		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	• •		3
		Security Administration		3
SEC	260	Security Administration II		
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 II		1
SPA	182	Spanish Lab II		1
SPA	211	Intermediate Spanish I		3
SPA	212	Intermediate Spanish II		3
SPA	281	Spanish Lab III	106	1

CDA	202	Spanish Lab IV	1
SPA TRN	282 111	Spanish Lab IV Chassis Maint /Light Papair	1 4
TRN	111	Chassis Maint./Light Repair	4
		Powertrain Maint./Light Repair	5
TRN TRN	120	Basic Transportation Electricity  Transportation Climate Control	2
	140	Transportation Climate Control	2
TRN	140A	*	2
TRN	170	PC Skills for Transportation	3
TRN	180	Basic Welding for Transportation	
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	143	Welding Metallurgy	2
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.

I. Gene	eral Education Courses	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

II. Major (	Courses				
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. Require	ed 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 M	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 I	Required Courses				
ACA-115	Success and Study Skills	0	2	1	

Total Credits: 70

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	
	C .				
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 Summ		_			
COM-120	Intro to Interpersonal Communication	3	0	3	
Social Science El		3	0	3	
Humanities Elect	tive	3	0	3	
Second Year Fall					
ACC-120	Principles of Financial Accounting	3	2	4	
HMT-210	Medical Insurance	3	0	3	
HMT-210	Management of Healthcare Organization	3	0	3	
BUS-137	Principles of Management	3	0	3	
BUS-253	Leadership & Management Skills	3	0	3	
DOG 233	Leadership & Management okins	3	O	3	
Second Year Spri	ng				
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 (1st 8 weeks)	4	0	4	
HMT-225	Practice Mgmt. Simulation (2nd 8 weeks)	2	2	3	
	Healthcare Management Technology	Recep	tionist	Certificate	e - C25200M
I. Major (	Courses				
	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. Concen	tration				
BUS-253	Leadership & Management Skills	3	0	3	

**Total Credits: 18** 

Other Major

Health Data Sys/Standards

III.

HIT-114

2 3 3

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.

I. General	Education Courses	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

II. Major	Courses			
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. Requir	ed 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
w. a.				
	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

Total Credits: 70

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
WI/XI-132	Statistical Methods	3	4	T
First Year Summe	er			
COM-120	Intro to Interpersonal Communication	3	0	3
Social Science Ele	ective	3	0	3
Humanities Elect	tive	3	0	3
Second Year Fall				
ACC-120	Dringinles of Einangial Assounting	2	2	4
HMT-210	Principles of Financial Accounting Medical Insurance	3	0	4 3
HMT-210		3	0	3
GRO-120	Management of Healthcare Organization Gerontology	3	0	3
OST-250	Long-Term Care Coding	2	2	3
031-230	Long-Term Care Coding	2	2	3
Second Year Spri	ng			
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. Conce	ntration			
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**

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)

<u>Title</u>		Class/Lab/C	<u>Credit</u>		
I. Genera	al Educ	ation 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.

II. Majo Requir			Clas	ss Lab	Clin.	Credit
•			2	0	0	2
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
_		ject Area: inology				
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3

Anator	ny & Pl	hysiology				
BIO	163	Basic Anatomy & Physiology	4	2	0	5
Profess	sional P	ractice Experience				
HIT	122	Professional Practice Experience I	0	0	3	1
HIT	124				3	1
HIT	222	-	0	0	6	2
		-				
III. Othe	r Majo	r 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	_ *	2	2	0	3
IV. Other	r Requi	red Courses				
	•	Success and Study Skills	0	2	0	1
Total (	Tandian.	71				

**Total Credits**: 71

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
		67				
First Year	-Spring	3				
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	-Summ	ner				
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
Humar	nities/A	rt Elective-see list on page 76	3	0	0	3
Second Y						
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
C 137						
Second Y	_	•		2	0	2
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
			105			

### Health Information Technology Coding Diploma (D45360) Medical Coding Concentration

Title			Class Lab	Clin.	Credi	<u>t</u>
I. Gen	eral Educa	ation Courses				
ENC	3 111	Writing and Inquiry	3	0	0	3
MA	Γ 152	Statistical Methods I	3	0	2	4
II. Ma	ijor Cours	es				
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>uired Subj</b> ical Termi					
MEI		Medical Terminology I	3	0	0	3
MEI		Medical Terminology II	3	0	0	3
Anat	tomy & Ph	nysiology				
BIO	163	Basic Anatomy & Physiology	4	2	0	5
Prof	essional P	ractice Experience				
HIT		Professional Practice Experience II	0	0	3	1
HIT	222	Professional Practice Experience III	0	0	6	2
III. Ot	her Requi	red Courses				
ACA	_	Success and Study Skills	0	2	0	1

**Total Credits: 40** 

Title			Class Lab	Clin.	Cred	<u>it</u>
First Year	-Fall					
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	g 1	3	0	2
HIT	215	Revenue Cycle Management	1	3	0	2
MED	121	Medical Terminology I	3	0	0	3
First Year	-Spring	3				
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
First Year	-Summ	ner				
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.	Cred	<u>it</u>
I. Major	Course	es				
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
Requir	ed Sub	ject Area:				
Medica	al Term	inology				
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
Total C	Credits:	17				
		Recommend	led Semes	ter Sc	bedu	le
First Year	-Sumn	ier				
HIT	112	Health Law Ethics	3	0	0	3
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	g				
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		<u>lit</u>
I. Major						
HIT	215	Revenue Cycle Management	1	3	0	2
Require	ed Sub	ject Area:				
Medica	l Term	inology				
MED	121	Medical Terminology I	3	0	0	3
MED	122	Medical Terminology II	3	0	0	3
Profess	ional P	ractice Experience				
HIT	124	Professional Practice Experience II	0	0	3	1
II. Other	Major	Courses				
OST	247	Procedural Coding	2	2	0	3
OST	248	Diagnostic Coding	2	2	0	3
OST		Medical Coding Certification Prep	2	3	0	3

First Year	r-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	r-Spring					
OST	247	Procedural Coding	2	2	0	3
OST	248	Diagnostic Coding	2	2	0	3
First Year	r-Sumn	ner				
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.	Cred	<u>lit</u>
I. Major	Course	es				
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**

First Year	First Year-Summer							
HIT	112	Health Law Ethics	3	0	0	3		
First Year	r-Fall							
HIT	220	Electronic Health Records	1	2	0	2		
HIT	225	Healthcare Informatics	2	2	0	3		
First Year	r-Spring	5						
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 Nurse Aide.

**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	Class/Lab/Clinical/Credit		
I. General Edu	ication Courses				
ENG 111	Writing and Inquiry	3	0	0	3
PSY 150	General Psychology	3	0	0	3
II. Major Cou	rses				
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 Maj	or 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	0	0	3
IV. Other Requ	uired Courses				
ACA 115	Success and Study Skills	0	2	0	1

**Total Credits: 39** 

First Year-Fall Class/Lab/Clinical/Cre					/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 S	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
Summe	r Semeste	er				
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/Cr	a dit			
	Title Class/Lab/Credit  I. General Education Courses						
COM	120	Interpersonal Communication	3	0	3		
or		1					
ENG	111	Writing and Inquiry	3	0	3		
COM	231	Public Speaking	3	0	3		
MAT	143	Quantitative Literacy	2	2	3		
Select o	ne cou	rse each from Humanities/Fine Arts and So	cial/Behavio	ral Scie	ences on page 76.		
	_						
II. Major					_		
CIS	110	Introduction to Computers	2	2	3		
CTI		Web, Pgm,and Db Foundation	2	2	3		
CTI		Network & Sec Foundation	2	2	3		
CTS	115	Info Sys Business Concepts	3	0	3		
III. Conc	antrati	on					
CTS	120	Hardware/Software Support	2	3	3		
NOS		Linux/Unix Single User	2	2	3		
NOS		Windows Single User	2	2	3		
NOS	230	Windows Admin I	2	2	3		
1100	230	William 1	2	_	3		
IV. Other	Major	Courses					
Take 25	5 Credi	its					
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	3	3		
WEB	214	Social Media	2	3	3		

Take 3	credits	from:			
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	3	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	3	2
V. Other	Requi	red Courses			
ACA	115	Success and Study Skills	0	2	1

**Total Credits: 73** 

First Yea	r-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	3	3
First Yea	r-Spring	g			
COM	120	Interpersonal Communication	3	0	3
or					
COM	231	1 8	3	0	3
CTS	120		2	3	3
DBA	110	1	2	3	3
NOS	130	Windows Single User	2	2	3
Pick L	ist 1(Sel	ect one)			
CTS	130	Spreadsheet	2	2	3
NOS	110	1 0 /	2	3	3
ELN	233	Fundamentals of Microprocessors	3	3	4
OST	136	8	2	2	3
WEB	120	Intro Internet Multimedia	2	2	3
WEB	225	Content Management System	2	2	3
First Yea	r-Sumn	ner			
CSC	151	Java Programming	2	3	3
Huma	nities E	lective	3	0	3
Social	Science	Elective	3	0	3

Second Yo	ear-Fal	1			
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 Li	st 2(Sel	ect one)			
WEB	111	Web Graphics	2	2	3
WEB	140	Web Development Tools	2	3	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3
Second Y	ear-Spr	ring			
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	3	3
Pick Li	st 3(Sel	ect one)			
WEB	287	Web E-Portfolio	1	3	2
OST	286	Professional Development	3	0	3
Second Y	ear-Sur	nmer			
ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3

# Information Systems Certificate (C25590A)

<u>Title</u>			Class	s/Lab/C	Credit
I. Major	Course	es			
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. Othe	r Majo	r Courses			
WEB	115	Web Markup and Scripting	2	3	3

#### **Total Credits: 12**

First Year	-Fall				
CIS	110	Intro to Computers	2	2	3
WEB	115	Web Markup and Scripting	2	3	3
First Year	-Spring	5			
NOS	130	Windows Single User	2	2	3
CTS	120	Hardware/Software Support	2	3	3

# Information Systems Advanced Certificate (C25590B)

Title	Title Class/Lab/Credit_				
I. Major	Course	es			
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. Othe	r Majo	r Courses			
CSC	151	JAVA Programming	2	3	3
Total C	Credits:	12			
		Recommended	l Semester So	chedi	ıle
First Year	-Fall				
NOS	230	Windows Admin I	2	2	3
NOS	120	Linux/Unix Single User	2	2	3
First Year	-Spring	g			
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)

Title		Class/Lab/Credit				
I. Genera	l Educ	ation Courses				
ENG	111	Writing and Inquiry	3	0	3	
COM	120	Interpersonal Communication	3	0	3	
or						
COM	231	Public Speaking	3	0	3	
MAT	143	Quantitative Literacy	2	2	3	
Select o	ne cou	rse each from Humanities/Fine Arts and So	ocial/Behavio	ral Sci	iences on page 76.	
II. Major	r Cours	ses				
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. Conc	entrati	on				
CSC	151	Java Programming	2	3	3	
WEB	115	Web Markup and Scripting	2	3	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	3	3	
WEB	151	Mobile Application Dev I	2	3	3	
WEB	182	PHP Programming	2	3	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	3	2
V. Other	Requi	red Courses			
ACA	115	Success and Study Skills	0	2	1

Total Credits: 72

		Kecommend	ded Semester Si	cheat	ule
First Year	-Fall				
ACA	115	Success and Study Skills	0	2	1
CIS	110	•	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	3	3
First Year	-Sprin	g			
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	-Sumn	ıer			
COM	120	Interpersonal Communication	3	0	3
or		-			
COM	231	Public Speaking	3	0	3
Humar	nities E	lective	3	0	3
Social S	Science	Elective	3	0	3
Second Y	ear-Fal	1			
GRD	151	Computer Design Basics	1	4	3
WEB	140	Web Development Tools	2	3	3
WEB	182		2	3	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3
Second Yo	ear-Spi	ring			
CTI	120	Network & Security Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3
WEB	151		2	3	3
WEB	250	Database Driven Websites	2	2	3
WEB	287	Web E-Portfolio	1	3	2
C 137					
Second Yo			2	0	2
ENG	111	Expository Writing	3 2	0 2	3
MAT	143	Quantitative Literacy	2	2	3

# Software and Web Development Certificate Program (C25590E)

Title			Class/Lab	/Credit	
I. Major	Cours	es			
CSC	151	Java Programming	2	3	3
WEB	115	Web Markup and Scripting	2	3	3
II. Other	-				
DBA	110	Database Concepts	2	3	3
WEB	111	Intro to Web Graphics	2	2	3
Total C	Credits:	12			
		Recommend	led Semester	Sched	ule
First Year-	<u>Fall</u>				
WEB 1	11	Web Graphics	2	2	3
WEB 1	15	Web Markup and Scripting	2	3	3
First Year	-Sprin	g			
CSC 15	il Java	Programming	2	3	3
DBA 1	10	Database Concepts	2	3	3
		C C 1 W	71D 1.		1
		Software and W Certificate	eb Developm Program (C		
<u>Title</u>		Certificate	_	25590	
I. Major		Certificate	Program (Ca	<b>25590</b> . 'Credit	<i>F</i> )
	Cours 120	Certificate	Program (C	25590	
I. Major CTI	120 <b>Major</b>	es Network & Sec Foundation Courses	Program (Ca	<b>25590</b> . 'Credit	<i>F</i> )
I. Major CTI II. Other WEB	120 <b>Major</b> 182	es Network & Sec Foundation Courses PHP Programming	Program (Cass/Lab)	25590. Credit 2 3	<b>3</b> 3
I. Major CTI II. Other WEB WEB	120 <b>Major</b> 182 210	Certificate  es  Network & Sec Foundation  Courses  PHP Programming Web Design	Program (Cass/Lab)  2  2  2  2	25590. Credit 2 3 2	3 3 3
I. Major CTI II. Other WEB	120 <b>Major</b> 182	es Network & Sec Foundation Courses PHP Programming	Program (Cass/Lab)	25590. Credit 2 3	<b>3</b> 3
I. Major CTI II. Other WEB WEB	120 <b>Major</b> 182 210 250	Certificate  es  Network & Sec Foundation  Courses  PHP Programming Web Design Database Driven Websites	Program (Cass/Lab)  2  2  2  2	25590. Credit 2 3 2	3 3 3
I. Major CTI II. Other WEB WEB WEB	120 <b>Major</b> 182 210 250	Certificate  es  Network & Sec Foundation  Courses  PHP Programming Web Design Database Driven Websites	Program (Cass/Lab)  2  2  2  2	25590. 'Credit 2 3 2 2	3 3 3 3
I. Major CTI II. Other WEB WEB WEB	120 Major 182 210 250 Credits:	Certificate  es  Network & Sec Foundation  Courses  PHP Programming Web Design Database Driven Websites	Program (Cass/Lab)  2  2  2  2  2	25590. 'Credit 2 3 2 2	3 3 3 3
I. Major CTI II. Other WEB WEB Total C	120 Major 182 210 250 Credits:	Certificate  es  Network & Sec Foundation  Courses  PHP Programming Web Design Database Driven Websites  12  Recommend	Program (Cass/Lab)  2  2  2  2  2	25590. 'Credit 2 3 2 2	3 3 3 3
I. Major CTI II. Other WEB WEB Total C	120  Major 182 210 250  Credits:	Certificate  es  Network & Sec Foundation  Courses  PHP Programming Web Design Database Driven Websites	Class/Lab  Class/Lab  2  2  2  2  2  2  2  ded Semester	25590 Credit 2 3 2 2 Scheda	3 3 3 3 3
I. Major CTI II. Other WEB WEB Total C	120  Major 182 210 250  Credits:  -Fall 182 210	Certificate  es  Network & Sec Foundation  Courses PHP Programming Web Design Database Driven Websites  12  Recommend  PHP Programming Web Design	Program (Cass/Lab)  2  2  2  2  2  2  2  2	25590 Credit 2 3 2 2 Scheda	3 3 3 3 3
I. Major CTI  II. Other WEB WEB WEB Total C  First Year WEB WEB	120  Major 182 210 250  Credits:  -Fall 182 210	Certificate  Recommend  Personal Person	Program (Cass/Lab)  2  2  2  2  2  2  2  2	25590 Credit 2 3 2 2 Scheda	3 3 3 3 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			
I. Genera	l Educ	ation Courses			
ENG	111	Writing and Inquiry	3	0	3
COM	120	Interpersonal Communication	3	0	3
or					
COM	231	Public Speaking	3	0	3
MAT	143	Quantitative Literacy	2	2	3
Select o	ne cou	rse each from Humanities/Fine Arts and So	cial/Behavio	ral Sci	ences on page 76.
II. Majoi	· Cours	ses			
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. Conc	entrati	on			
WEB	115	Web Markup and Scripting	2	3	3
WEB	210	Web Design	2	2	3
TV Oth on	Maian	Courses			
IV. Other	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 Web Grapines Intro to Internet Multimedia	2	2	3
WEB	140	Web Development Tools	2	3	3
WEB	151	Mobile Application Dev I	2	3	3
WEB	182	PHP Programming	2	3	3
WEB	214	Social Media	2	3	3

WEB WEB WEB	250 285 287		2 2 1	2 2 3	3 3 2
V. Other	Requi	red Courses			
ACA	115	Success and Study Skills	0	2	1
Total C	redits:	72			
First Year	-Fall				
ACA	115	Success and Study Skills	0	2	1
CIS	110	1	2	2	3
CTS	115	, ,	3	0	3
CTI	110	, 0	2	2	3
WEB	111	Intro to Web Graphics	2	2	3
WEB	115	Web Markup & Scripting	2	3	3
First Year	-Sprin	p			
CSC	151		2	3	3
DBA	110	,	2	3	3
WEB		Intro Internet Multimedia	2	2	3
WEB	214	Social Media	2	3	3
First Year	-Sumn	ner			
COM	120	Interpersonal Communication	3	0	3
or		-			
COM 2	31	Public Speaking	3	0	3
Human	ities E	lective	3	0	3
Social S	Science	Elective	3	0	3
Second Y	ear-Fal	1			
GRD	151	1 0	1	4	3
WEB	140	Web Development Tools	2	3	3
WEB	182	PHP Programming	2	3	3
WEB	210	Web Design	2	2	3
WEB	285	Emerging Web Technologies	2	2	3
Second Y		ring			
CTI	120	Network & Security Foundation	2	2	3
GRD	152	Computer Design Tech I	1	4	3
WEB	151	Mobile Application Dev I	2	3	3
WEB	250	Database Driven Websites	2	2	3
WEB	287	Web E-Portfolio	1	3	2
Second Y	ear-Sui				
ENG	111	Expository Writing	3	0	3
MAT	143	Quantitative Literacy	2	2	3

# Web Administration & Design Certificate Program (C25590G)

Title		Class/Lab/C	<u>Credit</u>		
I. Major	Course	es			
WEB	115	Web Markup and Scripting	2	3	3

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	3	3
Total C	Credits:	12			
First Year	-Fall				
WEB 1	11	Web Graphics	2	2	3
WEB 1	15	Web Markup and Scripting	2	3	3
First Year	-Spring				
WEB 1	20	Intro Internet Multimedia	2	2	3
WEB 2	14	Social Media	2	3	3

# Web Administration & Design Advanced Certificate Program (C25590H)

Title			Class/Lab/C	<u>redit</u>	
I. Major	Course	es			
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	r-Fall				
GRD	151	Computer Design Basics	1	4	3
WEB	210	Web Design	2	2	3
First Year	r-Sprin	g			
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), C40350A (Certificate), C40350B (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.

Class/Lab/Credit

**76** 

TILLE						
I. Ge	neral E	ducation Courses				
COM	120	Interpersonal Communications	3	0	3	
or						
COM	231	Public Speaking	3	0	3	
ENG	111	Writing and Inquiry	3	0	3	
MAT	121	Algebra/Trigonometry I	2	2	3	
Select or	ne cours	se each from Humanities/Fine Arts and	Social/Behavio	oral Sc	iences on	page '
		Core Courses				
A. Majo						
EGR	125	Appl Software for Tech	1	2	2	
ISC	112	Industrial Safety	2	0	2	
III. Co	ncentra	ation				
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	
TV O	han Mai	ion Countries				
Take 8 c	-	jor Courses				
MAC	121	Intro to CNC	2	0	2	
MNT	110	Intro to CNC 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	113	Work-Based Learning I	0	0	4	
WBL	121	Work-Based Learning I	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	
				-		

Title

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
WDL	211	Work Bused Learning IV	· ·	O	
Take 8 c	redits				
BPR	135	Schematics and Diagrams	2	0	2
EGR	150	Introduction to Engineering	1	2	2
ELC	115	Industrial Wiring	2	6	4
MNT	160	Industrial Fabrication	1	3	2
V. Ot	her Rea	juired Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1
71071	220	Trotessional Transition	1	Ü	1
Total Cr	edits:	66			
		Recommende	d Semester	Sched	ule
First Yea	T-11				
ACA	115	Success and Study Skills	0	2	1
ATR	113	Intro to Automation	2	3	
EGR		Appl. Software for Tech	1		3
	125	* *	=	2	2
ELC	131	Circuit Analysis	3	3	4
HYD	110	Hydraulics/Pneumatics	2	3	3
ISC	112	Industrial Safety	1	0	2
First Yea	ır-Sprin	g			
BPR	135	Schematics and Diagrams	2	0	2
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 Yea	r-Sumn	ner			
MAT	121	Algebra/Trigonometry I	2	2	3
		lective – see page75	3	0	3
		e Arts Elective – see list on page75	3	0	3
Second ?			2	2	2
ELC	130	Adv Motors/Controls	2	2	3
ELC	213	Instrumentation	3	2	4
MAC	121	Introduction to CNC	2	0	2
MEC	130	Mechanisms	2	2	3
PCI	264	Process Controls with PLC's	3	3	4
_					
Second '	_	=			
ACA	220	Professional Transition	1	0	1
COM	120	Interpersonal Communication	3	0	3
EGR	150	Intro to Engineering	1	2	2
FIC	115	Industrial Wiring	2	6	4

ELC

PHY

115

131

Industrial Wiring

Physics - Mehanics

**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

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# Mechatronics Engineering Technology Diploma Program (D40350)

I. Gen	eral Ed	ucation Courses			
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3
II. Major	Course	es			
A. Core	Cours	ses			
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 – Mehanics	3	2	4
III. Oth	er Majo	or Courses			
Take 4 cre	dits				
MAC	121	Introduction to CNC	2	0	2
MNT	110	Intro to Maintenance Processes	1	3	2
MNT	160	Industrial Fabrication	1	3	2
WBL	111	Work-Based Learning I	0	0	1
WBL	112	Work-Based Learning I	0	0	2
WBL	121	Work-Based Learning II	0	0	1
WBL	122	Work-Based Learning II	0	0	2
WBL	131	Work-Based Learning III	0	0	1
WBL	132	Work-Based Learning III	0	0	2
WBL	211	Work-Based Learning IV	0	0	1
WBL	212	Work-Based Learning IV	0	0	2
IV. Oth	er Requ	uired Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1
Total Cred	lits:	39			
		Recommended Sen	iester S	Schedu	le
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-	Sprino				
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 – Mehanics	3	2	4
First Year-	Summ	er			
ENG	111	Writing and Inquiry	3	0	3
MAT	121	Algebra/Trigonometry I	2	2	3

ACA   220	C 137	T. 11								
ATR				1	0	1				
MAC										
MAC										
Najor Courses										
Name   1	MAC	121	introduction to CNC	2	U	2				
ATR		M	echatronics Engineering Technolo	gy Certific	ate Pr	ogram				
ATR	I. Maior (	Course	s							
EGR         125         Appl Software for Tech         1         2         2           EGR         150         Introduction to Engineering         1         2         2           ELC         128         Intro to PLC         2         3         3           Total Credits:         12           Recommended Semester Schedule           First Year-Fall           ATR         112         Intro to Automation         2         3         3           EGR         125         Appl Software for Tech         1         2         2           Eirst Year-Spring           DFT         119         Basic CAD         1         2         2           ELC         128         Intro to PLC         2         3         3           ELC         128         Intro to Automation         2         3         3           DFT         119         Basic CAD         1         2         2           EGR         125         Appl Software for Tech         1         2         2           EGR         150         Intro to PLC         2         3         3				2	3	3				
EGR         150         Introduction to Engineering         1         2         2           ELC         128         Intro to PLC         2         3         3           Total Credits:         Recommended Semester Schedule           First Year-Fall           ATR         112         Intro to Automation         2         3         3           EGR         125         Appl Software for Tech         1         2         2           First Year-Spring           DFT         119         Basic CAD         1         2         2         3         3           Mechatronics Engineering Technology Certificate Program (engineering Technology Certificate			Basic CAD	1						
EGR         150         Introduction to Engineering         1         2         2           ELC         128         Intro to PLC         2         3         3           Total Credits:         Recommended Semester Schedule           First Year-Fall           ATR         112         Intro to Automation         2         3         3           EGR         125         Appl Software for Tech         1         2         2           First Year-Spring           DFT         119         Basic CAD         1         2         2         3         3           Mechatronics Engineering Technology Certificate Program (engineering Technology Certificate	EGR	125	Appl Software for Tech	1	2	2				
Recommended Semester Schedule   Semester Schedule				1	2	2				
Recommended Semester Schedule   First Year-Fall	ELC			2	3	3				
First Year-Fall	Total Cre	dits:	12							
ATR         112         Intro to Automation         2         3         3           EGR         125         Appl Software for Tech         1         2         2           First Year-Spring           DFT         119         Basic CAD         1         2         2           EGR         150         Intro duction to Engineering         1         2         2           ELC         128         Intro to PLC         2         3         3           EATR         112         Intro to Automation         2         3         3           DFT         119         Basic CAD         1         2         2           EGR         125         Appl Software for Tech         1         2         2           EGR         150         Intro to PLC         2         3         3           ELC         128         Intro to PLC         2         3         3           HYD         110         Hydraulics/Pneumatics I         2         3         3           Recommended Semester Schedule           First Year-Fall           ATR         11         2         2 <t< td=""><td></td><td></td><td>Recommende</td><td>d Semester</td><td>Sched</td><td>lule</td></t<>			Recommende	d Semester	Sched	lule				
EGR         125         Appl Software for Tech         1         2         2           First Year-Spring           DFT         119         Basic CAD         1         2         2           EGR         150         Intro duction to Engineering         1         2         2           ELC         128         Intro to PLC         2         3         3           ATR         112         Intro to Automation         2         3         3           DFT         119         Basic CAD         1         2         2           EGR         125         Appl Software for Tech         1         2         2           EGR         150         Introduction to Engineering         1         2         2           ELC         128         Intro to PLC         2         3         3           HYD         110         Hydraulics/Pneumatics I         2         3         3           MNT         110         Intro to Automation         2         3         3           ATR         112         Introduction to Engineering         1         2         2         3         3     <	First Year	-Fall								
First Year-Spring   DFT   119   Basic CAD   1   2   2   2   2   2   2   2   2   2	ATR	112	Intro to Automation	2	3	3				
DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2         ELC       128       Intro to PLC       2       3       3         Mechatronics Engineering Technology Certificate Program         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         EGR       150       Introduction to Engineering       1       2       2         HYD       110       Hydraulics/Pneumatics I       2       3       3         MNT       110       Intro to Maintenance Processes       1       3       2         Total Credits:         Recommended Semester Schedule     First Year-Fall  ATR  112  Intro to Automation  2 3 3 3 3 3 3 3 3 4 4 7 7 7 7 8 7 8 7 8 8 8 8 7 8 7 8 8 8 8	EGR	125	Appl Software for Tech	1	2	2				
DFT         119         Basic CAD         1         2         2           EGR         150         Introduction to Engineering         1         2         2           ELC         128         Intro to PLC         2         3         3           Mechatronics Engineering Technology Certificate Program           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           EGR         150         Introduction to Engineering         1         2         2         3         3           HYD         110         Hydraulics/Pneumatics I         2         3         3           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	First Year	-Spring	g							
L. Major Courses   ATR   112   Intro to Automation   1   2   2   2   3   3   3   3   3   3   3				1	2	2				
Najor Courses	EGR	150	Introduction to Engineering	1	2	2				
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         EGR       150       Introduction to Engineering       1       2       2         ELC       128       Intro to PLC       2       3       3         HYD       110       Hydraulics/Pneumatics I       2       3       3         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         DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1	ELC	128	Intro to PLC	2	3	3				
ATR       112       Intro to Automation       2       3       3         DFT       119       Basic CAD       1       2       2         EGR       125       Appl Software for Tech       1       2       2         EGR       150       Introduction to Engineering       1       2       2         ELC       128       Intro to PLC       2       3       3         HYD       110       Hydraulics/Pneumatics I       2       3       3         MNT       110       Intro to Maintenance Processes       1       3       2         Total Credits:         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         DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2		Me	echatronics Engineering Technolog	gy Certifica	ate Pro	gram				
ATR       112       Intro to Automation       2       3       3         DFT       119       Basic CAD       1       2       2         EGR       125       Appl Software for Tech       1       2       2         EGR       150       Introduction to Engineering       1       2       2         ELC       128       Intro to PLC       2       3       3         HYD       110       Hydraulics/Pneumatics I       2       3       3         MNT       110       Intro to Maintenance Processes       1       3       2         Total Credits:         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         DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2	I. Major (	Course	S							
DFT       119       Basic CAD       1       2       2         EGR       125       Appl Software for Tech       1       2       2         EGR       150       Introduction to Engineering       1       2       2         ELC       128       Intro to PLC       2       3       3         HYD       110       Hydraulics/Pneumatics I       2       3       3         MNT       110       Intro to Maintenance Processes       1       3       2 <b>Recommended Semester Schedule First Year-Fall</b> ATR       112       Intro to Automation       2       3       3         EGR       125       Appl Software for Tech       1       2       2         HYD       110       Hydraulics/Pneumatics       2       3       3 <b>First Year-Spring</b> DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2				2	3	3				
EGR       150       Introduction to Engineering       1       2       2         ELC       128       Intro to PLC       2       3       3         HYD       110       Hydraulics/Pneumatics I       2       3       3         MNT       110       Intro to Maintenance Processes       1       3       2 <b>Recommended Semester Schedule First Year-Fall</b> ATR       112       Intro to Automation       2       3       3         EGR       125       Appl Software for Tech       1       2       2         HYD       110       Hydraulics/Pneumatics       2       3       3 <b>First Year-Spring</b> DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2	DFT	119	Basic CAD	1	2	2				
EGR       150       Introduction to Engineering       1       2       2         ELC       128       Intro to PLC       2       3       3         HYD       110       Hydraulics/Pneumatics I       2       3       3         MNT       110       Intro to Maintenance Processes       1       3       2 <b>Recommended Semester Schedule First Year-Fall</b> ATR       112       Intro to Automation       2       3       3         EGR       125       Appl Software for Tech       1       2       2         HYD       110       Hydraulics/Pneumatics       2       3       3 <b>First Year-Spring</b> DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2	EGR	125	Appl Software for Tech	1	2	2				
ELC       128       Intro to PLC       2       3       3         HYD       110       Hydraulics/Pneumatics I       2       3       3         MNT       110       Intro to Maintenance Processes       1       3       2         Total Credits:         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         DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2	EGR			1	2	2				
MNT 110 Intro to Maintenance Processes         1 3 2           Recommended Semester Schedule           First Year-Fall           ATR 112 Intro to Automation 2 3 3 3           EGR 125 Appl Software for Tech 1 2 2           HYD 110 Hydraulics/Pneumatics 2 3 3 3           First Year-Spring           DFT 119 Basic CAD 1 2 2           EGR 150 Introduction to Engineering 1 2 2	ELC			2	3	3				
Total Credits:17Recommended Semester ScheduleFirst Year-FallATR112Intro to Automation233EGR125Appl Software for Tech122HYD110Hydraulics/Pneumatics233First Year-SpringDFT119Basic CAD122EGR150Introduction to Engineering122	HYD	110	Hydraulics/Pneumatics I	2	3	3				
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 DFT 119 Basic CAD 1 2 2 EGR 150 Introduction to Engineering 1 2 2			Intro to Maintenance Processes	1	3	2				
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         DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2	Total Cre	dits:	17							
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         DFT       119       Basic CAD       1       2       2         EGR       150       Introduction to Engineering       1       2       2			Recommended Semester Schedule							
EGR125Appl Software for Tech122HYD110Hydraulics/Pneumatics233First Year-SpringDFT119Basic CAD122EGR150Introduction to Engineering122	First Year	-Fall								
HYD 110 Hydraulics/Pneumatics 2 3 3  First Year-Spring  DFT 119 Basic CAD 1 2 2  EGR 150 Introduction to Engineering 1 2 2	ATR	112	Intro to Automation	2	3	3				
HYD 110 Hydraulics/Pneumatics 2 3 3  First Year-Spring  DFT 119 Basic CAD 1 2 2  EGR 150 Introduction to Engineering 1 2 2	EGR	125	Appl Software for Tech	1	2	2				
DFT 119 Basic CAD 1 2 2 EGR 150 Introduction to Engineering 1 2 2		110		2	3	3				
DFT 119 Basic CAD 1 2 2 EGR 150 Introduction to Engineering 1 2 2	First Year	-Sprins	, ,							
EGR 150 Introduction to Engineering 1 2 2				1	2	2				
e e		150	Introduction to Engineering	1	2	2				
ELC 120 IIIII to FLC 2 3 3	ELC	128	Intro to PLC	2	3	3				

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.

Class/Lab/Clinical/Credit

0

I. Major	Course	es										
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												
		Recomme	nded Seme	ster S	Schedu	ıle						
First Year	-Fall	Recomme	nded Seme	ster S	Schedu	ıle						
First Year NAS	- <b>Fall</b> 101	Recomme.  Nurse Aide I	nded Seme		Schedu 3							
NAS	101 121 - <b>Spring</b>	Nurse Aide I Medical Terminology I	3	4	3	6						

122 Medical Terminology II

# FNC-Associate Degree Nursing, Non-Integrated

A45110 (Associate Degree)

The Foothills Nursing Consortium (FNC) Associate Degree Program entered its last cohort Fall 2021. They are no longer accepting new students and will complete the final cohort Spring 2023. Please see the MTCC Associate Degree Nursing (ADN) Program for future admission to the ADN program.

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.

#### Footbills 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.

<u>Title</u>	le Class/Lab/Clinical/Credit							
I. Genera	al Educa	ation 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		
	11, ART	ective-Select one from the list below:	3 I 215, Pl	0 HI 240	0 , or	3		
II. Majo	r Cours	es						
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 for FNC Final Cohort

Students are not allowed to enroll in the NUR courses until formally accepted into the program. Please see admission requirements.

Second Ye	ear-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 Ye NUR Human	213	ing Complex Health Concepts ecSee list on preceding page	4 3	3	15 0	10 3

## MTCC-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.

The McDowell Tech 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.

Please visit the McDowell Technical Community College Nursing website for the complete admission packet.

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/Cli	nical/(	<u>Credit</u>	
I. Genera	al Educ	ation 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 Discipline	s 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	U	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.)

#### 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
Human	ities El	ecSee 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

Title		Class/Lab/Credit				
I. Genera	al Educ	cation Courses				
COM	120	Interpersonal Communication	3	0	3	
or		•				
COM	231	Public Speaking	3	0	3	
ENG	111	Writing and Inquiry	3	0	3	
MAT	143	Quantitative Literacy	3	0	3	
Select o	ne cou	rse each from Humanities/Fine Arts and	Social/Behavior	al Sc	iences on	page 76.
II. Major	r Cour	ses				
CIS	110	Introduction to Computers	2	2	3	
OST	136	Word Processing	2	2	3	
OST		Office Editing	3	0	3	
OST	184	Records Management	2	2	3	
OST	289	Office Admin. Capstone	2	2	3	
III. Conc	entrati	on				
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				
		s 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	· · · · · · · · · · · · · · · · · · ·	2	2	3
WEB	214	Social Media	2	2	3
	-	red Courses			
ACA	115	Success and Study Skills	0	2	1
Total C	Credits:	68			
		Recommended Se	emester S	chedi	ıle
F: . 37	r 11				
First Year ACA	:- <b>Fall</b> 115	Success and Study Skills	0	2	1
CIS	110	•	2	2	
OST		Introduction to Computers	2	2	3
	122	1			3
OST	131	, 6	1	2	2
OST	164	Office Editing	3	0	3
First Year	-Spring	g			
CTS	130		3	2	3
OST	134	-	2	2	3
	136	,	2	2	3
OST	184	•	2	2	3
T: . 37					
First Year				0	
ENG	111	Writing and Inquiry	3	0	3
		ective-See list on page 75	3	0	3
Social S	Science	s Elective-See list under required courses	3	0	3
Second Y	ear-Fal	1			
ACC	120	Principles of Financial Accounting	3	2	4
BUS	260	-	3	0	3
MKT			3	0	3
OST	236		3	0	3
001	230	ravancea word rocessing	3	Ü	3
Second Y	_				
CTS	135	Integrated Software Intro	2	4	4
DBA		Database Concepts	2	3	3
MAT	143	Quantitative Literacy	3	0	3
OST	135	Advanced Text Entry and Formatting	2	2	3
Second Y	ear-Sur	nmer			
COM	120	Interpersonal Communications	3	0	3
or	120	2010 Personal Communications	5	J	,
COM	231	Public Speaking	3	0	3
OST	286		3	0	3
OST	289	1	2	2	3
			_	-	_

## General Office Administrative Diploma Program (D25370A)

Title	Title		Clas	s/Lab/C	Credit
I. Genera	al Educ	ation Courses			
ENG	111	Writing and Inquiry	3	0	3
		Quantitative Literacy	2	2	3
or					
COM	120	Interpersonal Communication	3	0	3

II. Major 1. Requ					
OST	164		3	0	3
CIS	110	Introduction to Computers	2	2	3
OST		Word Processing	2	2	3
OST		Records Management	2	2	3
OST	289	•	2	2	3
III. Cond	entrat	ion Requirements			
OST	122	Office Computations	2	2	3
OST	236	-	2	2	3
OST	286		3	0	3
IV. Other (A total		Courses emester Hours must be selected from identif	fied prefixes)	)	
BUS	110	Introduction to Business	3	0	3
CTS	130	Spreadsheet	2	2	3
DBA	110	Database Concepts	2	3	3
MKT	223	Customer Service	3	0	3
OST	134	Text Entry and Formatting	2	2	3
WEB	214	Social Media	2	2	3
IV. Other	Requi	ired Courses			
ACA	115	Success and Study Skills	0	2	1
Total C	redits:				
Total C	redits:	37 Recommended S	Semester S	chedi	ıle
			Semester S	chedi	ıle
Total C First Year- ACA		Recommended S	Semester So	c <b>hedu</b> 2	<b>ıle</b> 1
First Year	- <b>Fall</b> 115				1
First Year	- <b>Fall</b> 115	Recommended S Success and Study Skills Customer Service	0	2	1 3
First Year ACA MKT	- <b>Fall</b> 115 223 122	Recommended S Success and Study Skills	0 3	2 0	1
First Year ACA MKT OST	- <b>Fall</b> 115 223 122	Recommended S Success and Study Skills Customer Service Office Computations	0 3 2	2 0 2	1 3 3
First Year- ACA MKT OST OST OST	-Fall 115 223 122 136 164	Recommended S Success and Study Skills Customer Service Office Computations Word Processing Office Editing	0 3 2 2	2 0 2 2	1 3 3 3
First Year- ACA MKT OST OST	-Fall 115 223 122 136 164	Recommended S Success and Study Skills Customer Service Office Computations Word Processing Office Editing	0 3 2 2	2 0 2 2	1 3 3 3
First Year- ACA MKT OST OST OST OST	-Fall 115 223 122 136 164 -Spring	Recommended S  Success and Study Skills Customer Service Office Computations Word Processing Office Editing	0 3 2 2 3	2 0 2 2 0	1 3 3 3 3
First Year- ACA MKT OST OST OST CST CIS MAT	-Fall 115 223 122 136 164 -Spring 110 143	Recommended S  Success and Study Skills Customer Service Office Computations Word Processing Office Editing  Introduction to Computers Quantitative Literacy	0 3 2 2 3	2 0 2 2 0	1 3 3 3 3 3
First Year- ACA MKT OST OST OST CIS MAT or COM	-Fall 115 223 122 136 164 -Spring 110 143	Success and Study Skills Customer Service Office Computations Word Processing Office Editing  Introduction to Computers Quantitative Literacy Interpersonal Communication	0 3 2 2 3	2 0 2 2 0	1 3 3 3 3 3 3
First Year- ACA MKT OST OST OST  First Year- CIS MAT or COM CTS	-Fall 115 223 122 136 164 -Spring 110 143 120 130	Success and Study Skills Customer Service Office Computations Word Processing Office Editing  Introduction to Computers Quantitative Literacy Interpersonal Communication Spreadsheet	0 3 2 2 3 3	2 0 2 2 0 2 2 0	1 3 3 3 3 3 3
First Year- ACA MKT OST OST OST CIS MAT or COM	-Fall 115 223 122 136 164 -Spring 110 143	Success and Study Skills Customer Service Office Computations Word Processing Office Editing  Introduction to Computers Quantitative Literacy Interpersonal Communication	0 3 2 2 3 3	2 0 2 2 0 2 2 0	1 3 3 3 3 3 3
First Year- ACA MKT OST OST OST  First Year- CIS MAT or COM CTS OST	-Fall 115 223 122 136 164 -Spring 110 143 120 130 184 236	Success and Study Skills Customer Service Office Computations Word Processing Office Editing  Introduction to Computers Quantitative Literacy Interpersonal Communication Spreadsheet Records Management Advanced Word Processing	0 3 2 2 3 3 2 2 2	2 0 2 2 0 2 2 0	1 3 3 3 3 3 3 3 3 3
First Year- ACA MKT OST OST OST  First Year- CIS MAT or COM CTS OST OST	-Fall 115 223 122 136 164 -Spring 110 143 120 130 184 236	Recommended S  Success and Study Skills Customer Service Office Computations Word Processing Office Editing  Introduction to Computers Quantitative Literacy Interpersonal Communication Spreadsheet Records Management Advanced Word Processing	0 3 2 2 3 3 2 2 2	2 0 2 2 0 2 2 0	1 3 3 3 3 3 3 3 3 3
First Year- ACA MKT OST OST OST  First Year- CIS MAT or COM CTS OST OST  First Year-	-Fall 115 223 122 136 164 -Spring 110 143 120 130 184 236	Success and Study Skills Customer Service Office Computations Word Processing Office Editing  Introduction to Computers Quantitative Literacy Interpersonal Communication Spreadsheet Records Management Advanced Word Processing	0 3 2 2 2 3 3 3 2 2	2 0 2 2 0 2 2 2 0 2 2 2	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

## General Office Administrative Certificate (C25370A)

<u>Title</u>		Class/Lab/C	<u>Credit</u>		
I. Major	Course	es			
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
II. Other	r Requi	red Course			
ACA	115	Success and Study Skills	0	2	1
Total (	Credits:	16			
First Year	r-Fall				
ACA	115	Success and Study Skills	0	2	1
OST	136	Word Processing	2	2	3
OST	164	Office Editing	3	0	3
First Year	r-Sprin	9			
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					
I. Genera	al Educ	cation Courses				
COM	120	Interpersonal Communication	3	0	3	
or		•				
COM	231	Public Speaking	3	0	3	
ENG	111	Writing and Inquiry	3	0	3	
MAT	143	Quantitative Literacy	3	0	3	
Select o	one cou	urse each from Humanities/Fine Arts and S	Social/Behavior	al Sc	ciences on	page 76.
II. Majo	r Cour	ses				
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. Conc	entrati	on				
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	· Maioı	r Courses				
		es from this list:				
BUS	110	Introduction to Business	3	0	3	
BUS	260	<b>Business Communications</b>	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	236	Advanced Word Processing	2	2	3	
OST	286	Professional Development	3	0	3	
WEB	214	Social Media	2	3	3	

## IV. Other Required Courses

ACA 115 Success and Study Skills

Total Credits: 69

## Recommended Semester Schedule

0 2 1

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-	Summ	er			
ENG	111	Writing and Inquiry	3	0	3
Humani	ites Ele	ective-See list on page 75	3	0	3
Social S	ciences	s Elective-See list under required courses	3	0	3
Second Ye	ar-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 Ye	ar-Spri	ing			
CTS	135	Integrated Software Intro	2	4	4
DBA	110	I	2	3	3
MAT	143	,	3	0	3
OST	153	Office Finance Solutions	2	2	3
Second Ye	ar-Sun	nmer			
COM	120	Interpersonal Communications	3	0	3
or COM	231	Public Speaking	3	0	3
OST	286	Professional Development	3	0	3
OST	289	Office Administration Capstone	2	2	3
001		capotone	_	_	-

## 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

Class/Lab/Credit

page 76.

COM	120	Intermore and Communication	3	0	3
COM	120	Interpersonal Communication	3	U	3
or	221	Dublia Casalrina	2	0	2
COM	231	Public Speaking	3	0	3
ENG Mat	111 143	Writing and Inquiry	3	0	3
		Quantitative Literacy urse each from Humanities/Fine Arts and So	· ·	-	-
Select	me cou	irse each from Humanities/Fine Arts and So	Ciai/ Bellavio	rai sc	iences on
II. Majo	r Cour	505			
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
031	207	Office Administration Capstone	2	2	3
III. Conc	entrati	on			
CTS	130	Spreadsheet	2	2	3
DBA	110	Database Concepts	2	3	3
OST	236	Advanced Word Processing	2	2	3
IV. Other	Major	Courses			
		s 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	286	Professional Development	3	0	3
WEB	214	Social Media	2	2	3

Title

I. General Education Courses

### IV. Other Required Courses

ACA 115 Success and Study Skills

**Total Credits: 68** 

## Recommended Semester Schedule

0 2 1

Fire	Year-Fall				
	CA 115	Success and Study Skills	0	2	1
C		Introduction to Computers	2	2	3
	ST 122	-	2	2	3
	ST 131		1	2	2
	ST 164	Office Editing	3	0	3
Fire	Year-Sprin	σ			
	TS 130	Spreadsheet	3	2	3
	ST 134	1	2	2	3
		Word Processing	2	2	3
	ST 184	e	2	2	3
Fire	Year-Sumi	mer			
	NG 111	Writing and Inquiry	3	0	3
		lective-See list on page 76	3	0	3
		es Elective-See list under required courses	3	0	3
		1			
Seco	nd Year-Fa	11			
A	CC 120	Principles of Financial Accounting	3	2	4
Bſ	JS 260	<b>Business Communications</b>	3	0	3
M	KT 223	Customer Service	3	0	3
O	ST 236	Advanced Word Processing	3	0	3
Seco	nd Year-Sp	ring			
C'	TS 135	Integrated Software Intro	2	4	4
D	BA 110	Database Concepts	2	3	3
M	AT 143	Quantitative Literacy	3	0	3
O	ST 135	Advanced Text Entry and Formatting	2	2	3
Seco	nd Year-Su	mmer			
C	OM 231	Public Speaking	3	0	3
O	ST 286	Professional Development	3	0	3
O	ST 289	Office Administration Capstone	2	2	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 imagining 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/Ci	edit				
I. Genera	I. General Education Courses							
COM	120	Interpersonal Communication	3	0	3			
or								
COM	231	Public Speaking	3	0	3			
ENG	111	Writing and Inquiry	3	0	3			
MAT		Quantitative Literacy	2	2	3			
Select o	Select one course each from Humanities/Fine Arts and Social/Rehavioral Sciences on page 76							

Select one course each from Humanities/Fine Arts and Social/Behavioral Sciences on page 76.

II. Majo	r Cours	ses			
PHO	110		3	6	5
PHO	115	Basic Studio Lighting	2	6	4
PHO	139	Intro. to Digital Imaging	1	4	3
PHO	224	Multimedia Production	2	3	3
III. Conc					
PHO	entrati 113		3	0	3
PHO	217	History of Photography	-	-	
		Photojournalism I Portraiture	1	6	4
	226 235	1 0111411411	3 2	<i>3</i>	4
1110	233	Commercial Fhotography	2	T	7
IV. Other	Major	Courses (Must be selected from identified p	refixes)		
		e 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- Tak	te 3 Hours:			
BUS	110		3	0	3
BUS	125	Personal Finance	3	0	3
BUS	230		3	0	3
CIS	110	e e	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	3	3
WEB	210	Web Design	2	2	3
WEB	214	Social Media	2	3	3
V. Other	Requi	red Courses			
ACA	115	Success and Study Skills	0	2	1

**Total Credits: 71** 

## Recommended Semester Schedule

First Year	First Year-Fall								
ACA	115	Success and Study Skills	0	2	1				
COM	120	Interpersonal Communication	3	0	3				
or									
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	4	3				
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	-Sumn	ner							
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 Yo	ear-Fal	1							
PHO	140	Digital Photo Imaging I	2	4	4				
PHO			2	2	3				
PHO	224	Multimedia Production	2	3	3				
PHO	226	Portraiture	3	3	4				
Second Ye	ear-Spr	ing							
РНО	_		3	3	4				
PHO	217	1	1	6	4				
РНО	235	*	2	4	4				
Second Yo	-ar-S	mmer							
MAT	143	Quantitative Literacy	2	2	3				
		nended for transfer to four-year colleges	2	2	,				
Social Science Elective-See list on page 75				0	3				

## ${\it Photographic Technology Certificate Program (C30280)}$

Title		Class/Lab/Cred	<u>lit</u>	
I. Major	Course	es		
PHO	110	Fundamentals of Photography	3	6 5
PHO	115	Basic Studio Lighting	2	6 4
PHO	139	Introduction to Digital Imaging	1	4 3

II. Other PHO	,	Courses Intermediate Photography	2	4	4
III. Other	r Requi	rements			
ACA	115	Success and Study Skills	0	2	1
Total C	redits:	17			
First Year	-Fall	Recommended S	emester So	chedu	ıle
PHO	110	Fundamentals of Photography	3	6	5
PHO	139	Intro. to Digital Imaging	1	4	3
ACA	115	Success and Study Skills	0	2	1
First Year			2	6	4
PHO		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 Nursing website for the current admission packet.

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/	La	b/ Clii	nical/ C	redit
I. Gener	al Educ	cation Courses					
ENG	111	Writing and Inquiry		3	0	0	3
PSY	150	General Psychology		3	0	0	3

II. Majo	r Cour	ses				
NUR	101	Practical Nursing I	7	6	6	11
NUR	102	Practical Nursing II	7	0	9	10
NUR	103	Practical Nursing III	6	0	9	9
III. Oth	er Maj	or Courses				
BIO	168	Anatomy & Physiology I	3	3	0	4
BIO	169	Anatomy & Physiology II	3	3	0	4
IV. Othe	r Requ	ired Courses				
ACA	115	Success and Study Skills	0	2	0	1

**Total Credits: 45** 

Fall Semester		Class Lab	Clinic	al Crec	<u>lit</u>	
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
Spring S	emester					
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
Summer	Semest	er				
NUR	103	Practical Nursing III	6	0	9	9

## Welding Technology

#### A50420 (Associate Degree) D50420 (Diploma) C50420A (Certificate) C50420B (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.

#### Associate Degree Program

Class/Lab/Credit

I.	Gene	eral Education Courses				
COM	120	Interpersonal Communications	3	0	3	
ENG	111	Writing and Inquiry	3	0	3	
MAT	121	Algebra and Trigonometry I	2	2	3	
Select o	ne cou	irse each from Humanities/Fine Arts a	nd Social/Beh	avior	al Sciences on page	76.
	_					
II. Ma			_	_		
WLD	110	Cutting Processes	1	3	2	
WLD	112	Basic Welding	1	3	2	
WLD	115	SMAW (Stick) Plate	2	9	5	
WLD	116	SMAW (Stick) Plate/Pipe	1	9	4	
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4	
WLD	131	GTAW (TIG) Plate	2	6	4	
WLD		Symbols & Specifications	2	2	3	
WLD	143	Welding Metallurgy	1	2	2	
WLD	151	Fabrication I	2	6	4	
***			1	,		
Take 8		<b>jor Courses</b> (Must be selected from i	dentified prefi	xes)		
			2	0	2	
ISC	112	Industrial Safety	2	0	2	
MAC	151	Machining Calculations	1	2	2	
MEC	142	Physical Metallurgy	1	2	2	
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	

Title

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
Take 11	credit	S			
BPR	111	Print Reading	1	2	2
CIS	110	Introduction to Computers	2	2	3
MAC	121	Intro to CNC	2	0	2
MAC	122	CNC Turning	1	3	2
MAC	124	CNC Milling	1	3	2
IV. Oth	ier Rec	juired Courses			
ACA	115	Success and Study Skills	0	2	1
ACA	220	Professional Transition	1	0	1

**Total Credits: 66** 

First Year-Fal	1			
ACA 115Succ	ess and Study Skills	0	2	1
WLD 112	•	1	3	2
WLD 141	Symbols & Specifications	2	2	3
BPR 111	Print Reading	1	2	2
MAC 121	Intro to CNC	2	0	2
ISC 112Indu	ıstrial Safety	2	0	2
MAC151Mac	hining Calculations	1	2	2
First Year-Spi	ing			
WLD 110	8	1	3	2
WLD 115	SMAW (Stick) Plate	2	9	5
WLD 131	GTAW (TIG) Plate	2	6	4
MAC 122	CNC Turning	1	3	2
First Year-Sur	nmer			
ENG 111	Writing and Inquiry	3	0	3
MAT 121	Algebra and Trigonometry I	2	2	3
Humanities	Student Choice	3	0	3
Social Science	e Student Choice	3	0	3
Second Year-l	Fall			
CIS 110	Introduction to Computers	2	2	3
MEC 142Phys	sical Metallurgy	1	2	2
WLD 116	SMAW (Stick) Plate/Pipe	1	9	4
WLD 121	GMAW (MIG) FCAW/Plate	2	6	4
Second Year-S				
ACA 220Prof	essional Transition	1	0	1
COM 120	Interpersonal Communications	3	0	3
MAC124CNO		1	3	2
WLD 143	Welding Metallurgy	1	2	2
WLD 151	Fabrication I	2	6	4
WLD 261	Certification Practices	1	3	2

## Welding Technology Diploma Program (D50420)

Title Class/Lab/Credi	<u>t</u>
I. General Education Courses	
ENG 101 Applied Communications I 3 0	3
MAT 110 Mathematical Measurement and Literacy 2 2	3
II. Major Courses	
WLD 110 Cutting Processes 1 3	2
WLD 112 Basic Welding 1 3	2
WLD 115 SMAW (Stick) Plate 2 9	5
WLD 116 SMAW (Stick) Plate/Pipe 1 9	4
WLD 121 GMAW (MIG) FCAW/Plate 2 6	4
WLD 131 GTAW (TIG) Plate 2 6	4
WLD 141 Symbols & Specifications 2 2	3
WLD 143 Welding Metallurgy 1 2	2
WLD 151 Fabrication I 2 6	4
III. Other Major Courses (Must be selected from identified prefixes) Take 4 credits	
ISC 112 Industrial Safety 2 0	2
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 121 Work-Based Learning II 0 0	1
WBL 122 Work-Based Learning II 0 0	2
WBL 131 Work-Based Learning III 0 0	1
WBL 132 Work-Based Learning III 0 0	2
WBL 211 Work-Based Learning IV 0 0	1
WBL 212 Work-Based Learning IV 0 0	2
Take 3 Credits	
CIS 110 Introduction to Computers 2 2	3
IV. Other Required Courses	
ACA 115 Success and Study Skills 0 2	1
ACA 220 Professional Transition 1 0	1

### **Total Credits: 45**

First Yea	ar-Fall				
ACA	115	Success and Study Skills	0	2	1
WLD	112	Basic Welding	1	3	2
WLD	141	Symbols & Specifications	2	2	3
ISC	112	Industrial Safety	2	0	2
First Yea	ar-Spri	ng			
WLD	110	Cutting Processes	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	131	GTAW (TIG) Plate	2	6	4
First Yea	ar-Sum	mer			
CIS	110	Introduction to Computers	2	2	3
MAT	110	Mathematical Measurement and Literacy	2	2	3

Second	Year-Fa	all			
WLD	116	SMAW (Stick) Plate/Pipe	1	9	4
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4
Second	Year-Sp	pring			
ACA	220	Professional Transition	1	0	1
ENG	101	Applied Communications I	3	0	3
WLD	143	Welding Metallurgy	1	2	2
WLD	151	Fabrication I	2	6	4
WLD	261	Certification Practices	1	3	2

### Welding Technology Certificate Program (C50420A) Level I

Title Class/La			/Lab/0	<u>Credit</u>		
I. Maj	or Cou	rses				
WLD	110	Cutting Processes		1	3	2
WLD	115	SMAW (Stick) Plate		2	9	5
WLD	131	GTAW (TIG) Plate		2	6	4
WLD	143	Welding Metallurgy		1	2	2

#### **Total Credits: 13**

#### Recommended Semester Schedule

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				
WLD	143	Welding Metallurgy	1	2	2				

### Welding Technology Certificate Program (C50420B) Level II

Title		Class/Lab/Cre	Class/Lab/Credit					
I. Major Courses								
WLD	110	Cutting Processes*	1	3 2				
or								
WLD	112	Basic Welding Process	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	143	Welding Metallurgy	1	2 2				

#### **Total Credits: 17**

First Year-Fall							
*Optio	n: Stud	ent Takes WLD 112					
WLD	112	Basic Welding*	1	3	2		
WLD	121	GMAW (MIG) FCAW/Plate	2	6	4		

<sup>\*</sup>High School Articulation: Welding Technology I= WLD 110, Welding Technology I and II = WLD 110 and WLD 115

#### First Year-Summer

*Option	: Stude	ent Takes WLD 110			
WLD	110	Cutting Processes	1	3	2
WLD	115	SMAW (Stick) Plate	2	9	5
WLD	131	GTAW (TIG) Plate	2	6	4
WLD	143	Welding Metallurgy	1	2	2

# MTCC Classes Offered By Semester

			55				
Prefix	Course #	Title		Semest	er Offe	red	Notes
ACA	115	Success & Study Skills		FA	SP	SU	
ACA	122	College Transfer Success		FA	SP	SU	
ACA	220	Professional Transition			SP	SU	
ACC	120	Principles of Financial Accounting		FA	SP		
ACC	121	Principles of Managerial Accounting		FA	SP		
ACC	129	Individual Income Taxes		FA			
ACC	130	Business Income Taxes			SP		
ACC	140	Payroll Accounting			SP		
ACC	150	Accounting Software Applications			SP		
ACC	180	Practices in Bookkeeping			SP		
ACC	220	Intermediate Accounting I		FA			
ACC	221	Intermediate Accounting II			SP		
ACC	227	Practices in Accounting				SU	
ACC	240	Government & Not-for-Profit Account	ting				Offered as needed
ACC	250	Advanced Accounting					Offered as needed
ACC	269	Audit & Assurance Services					Offered as needed
AHR	110	Intro to Refrigeration		FA			
AHR	111	HVACR Electricity		FA			
AHR	112	Heating Technology			SP		
AHR	113	Comfort Cooling			SP		
AHR	114	Heat Pump Technology				SU	
AHR	115	Refrigeration Systems				SU	
AHR	130	HVAC Controls			SP		
AHR	160	Refrigerant Certification		FA	SP	SU	
AHR	180	HVACR Customer Relations		FA	SP	SU	
AHR	211	Residential Building Design				SU	
AHR	212	Advanced Comfort Systems		FA			
AHR	213	HVACR Building Code		FA			
ART	111	Art Appreciation		FA	SP	SU	
ART	114	Art History Survey I					
ART	115	Art History Survey II					
ART	121	Two-Dimensional Design		FA			
ART	171	Digital Deisgn I			SP		
ART	275	Introduction to Graphic Design		FA			
ASL	111	Elementary ASL I					Offered as needed
ASL	112	Elementary ASL II					Offered as needed
ASL	181	ASL Lab I					Offered as needed
ASL	182	ASL Lab II					Offered as needed
AST	151	General Astronomy I					Offered as needed
AST	151A	General Astronomy I Lab					Offered as needed
AST	152	General Astronomy II					Offered as needed
AST	152A	General Astronomy II Lab					Offered as needed
ATR	112	Introduction to Automation		FA			
ATR	212	Industrial Robots		FA			
ATT	115	Green Transporation Safety & Service	!				Offered as needed
ATT	125	Hybrid-Electric Transportation					Offered as needed
ATT	140	Emerging Transporation Technology					Offered as needed
AUT	113	Automotive Servicing I			SP		Even-numbered years
AUT	116	Engine Repair		FA			Odd-numbered years

Prefix	Course #	Title		Semes	ter Off	ered	Notes
AUT	116A	Engine Repair Lab		FA			Odd-numbered years
AUT	141	Suspension & Steering Systems				SU	Odd-numbered years
AUT	141A	Suspension & Steering Lab				SU	Odd-numbered years
AUT	151	Brake Systems				SU	Odd-numbered years
AUT	151A	Brake Systems Lab				SU	Odd-numbered years
AUT	161	Basic Auto Electricity					Offered as needed
AUT	181	Engine Performance I			SP		Even-numbered years
AUT	181A	Engine Performance I Lab			SP		Even-numbered years
AUT	183	Engine Performance II				SU	Even-numbered years
AUT	221	Auto Transmissions/Transaxles		FA			Even-numbered years
AUT	221A	Auto Transmissions/Transaxles Lab		FA			Even-numbered years
AUT	231	Manual Trans/Ax/Drtrains		FA			Even-numbered years
AUT	231A	Manual Trans/Ax/Drtrains Lab		FA			Even-numbered years
BIO	111	General Biology		FA	SP		
BIO	112	General Biology II			SP	SU	
BIO	155	Nutrition					Offered as needed
BIO	163	Basic Anatomy and Physiology		FA			
BIO	168	Anatomy and Physiology I		FA	SP		
BIO	169	Anatomy and Physiology II		FA	SP	SU	
BIO	175	General Microbiology					Offered as needed
BIO	275	Microbiology		FA	SP	SU	
BPR	111	Print Reading		FA			
BPR	135	Schematics & Diagrams		FA	SP		
BUS	110	Introduction to Business		FA	SP	SU	
BUS	115	Business Law I		FA	SP		
BUS	125	Personal Finance		FA	SP		
BUS	135	Principles of Supervision			SP		
BUS	137	Principles of Management		FA	SP		
BUS	147	Business Insurance		FA	٥.	SU	
BUS	153	Human Resource Management		1.7	SP	30	
BUS	225	Business Finance		FA	<b>J</b> 1		
BUS	230	Small Business MAnagement			SP	SU	
BUS	240	Business Ethics			٥.	30	Offered as needed
BUS	253	Leadership and Management Skills		FA			Offered as freeded
BUS	260	Business Communication		FA			
BUS	280	REAL Small Business		17			
CCT	110	Intro to Cyber Crime		FA			
CCT	112	Ethics and High Technology		17	SP		
CCT	121	Computer Crime Investigation			SP		
CCT	231	Technology Crimes and Law		FA	3P		
CCT	250	Network Vulnerabilities I		FA			
CCT	289	Capstone Project		FA		SU	
CHM	131	Introduction to Chemistry				30	Offered as needed
		•					
CHM CHM	131A	Introduction to Chemistry Lab					Offered as needed Offered as needed
	132	Organic and Biochemistry		<b>.</b> .			Offered as needed
CHM	151	General Chemistry I		FA	CD		
CHM	152	General Chemistry II			SP		Offered as need and
CIS	070	Fundamentals of Computing		<b>.</b> .	CD	cı.	Offered as needed
CIS	110	Introduction to Computers		FA	SP	SU	
CIS	111	Basic PC Literacy	2.40	FA			

Prefix CIS	Course #	Title Intro to Programming & Logic	Semester	Offered	Notes Offered as needed
CJC	110	Basic Law Enforcement BLET	FA	SP	*As needed, call to see when offered*
					Madison Harris: 828-652-0633
CJC	111	Introduction fo Criminal Justice		SP	
CJC	112	Criminology	FA		
CJC	120	Interviews/Interrogations			Offered as needed
CJC	121	Law Enforcement Operations			Offered as needed
CJC	122	Community Policing			Offered as needed
CJC	131	Criminal Law			Offered as needed
CJC	132	Court Procedure and Evidence		SP	
CJC	141	Corrections			Offered as needed
CJC	144	Crime Scene Processing			Offered as needed
CJC	160	Terrorism: Underlying Issues			Offered as needed
CJC	161	Introduction to Homeland Security			Offered as needed
CJC	212	Ethics and Communication Relations			Offered as needed
CJC	231	Constitutional Law		SP	
CJC	232	Civil Liability			Offerd as needed
COM	110	Introduction to Communication			Offered as needed
COM	120	Introduction to Interpersonal Communication	FA	SP S	U
COM	231	Public Speaking	FA	SP S	U
cos	111	Cosmetology Concepts I	FA	SP	
COS	112	Salon I	FA	SP	
cos	113	Cosmetology Concepts II	FA	SP	
COS	114	Salon II	FA	SP	
cos	115	Cosmetology Concepts III		S	U
COS	116	Salon III		S	U
cos	117	Cosmetology Concepts IV	FA	SP	
COS	118	Salon IV	FA	SP	
cos	119	Esthetics Concepts I	FA	SP S	U
COS	120	Esthetics Salons I	FA	SP S	U
cos	121	Manicure/Nail Technology I	FA	SP	
COS	125	Esthetics Concepts II	FA	SP S	U
cos	126	Esthetics Salon II	FA	SP S	U
COS	222	Manicure/Nail Technology II	FA	SP	
cos	224	Trichology & Chemistry			Offered as needed
COS	240	Contemporary Design			Offered as needed
COS	250	Computerized Salon Ops		S	U
COS	253	Esthetics Instructional Concepts I	FA		
COS	254	Esthetics Instructional Concepts II		SP	
COS	271	Instructor Concepts I			Offered as needed
COS	272	Instructor Practicum I			Offered as needed
COS	273	Instructor Concepts II			Offered as needed
COS	274	Instructor Practicum II			Offered as needed
CSC	134	C++ Programming		SP	
CSC	151	JAVA Programming		SP	
CTI	110	Web, PGM, and Database Management	FA		
CTI	120	Network & Security Foundation		SP	
CTI	140	Virtualization Concepts			Offered as needed
CTS	115	Information Systems Business Concepts	FA	SP	
CTS	120	Hardware/Software Support		SP	

Prefix	Course #	Title	Semester	Offere	d	Notes
CTS	130	Spreadsheet		SP	SU	
CTS	135	Integrated Software Introduction		SP		
DBA	110	Database Concepts		SP	SU	
DFT	119	Basic CAD		SP		
DFT	170	Engineering Graphics		SP		
DRA	111	Theatre Appreciation		SP		
DRA	126	Storytelling				Offered as needed
ECO	251	Principles of Microeconomics	FA			
ECO	252	Principles of Macroeconomics		SP	SU	
EDU	119	Intro to Early Childhood Education	FA	SP	SU	
EDU	131	Child, Family, & Community	FA			
EDU	144	Child Development I	FA			
EDU	145	Child Development II		SP		
EDU	146	Child Guidance		SP		
EDU	151	Creative Activities	FA			
EDU	153	Health, Safety, & Nutrition	FA			
EDU	184	Early Childhood Intro Practicum		SP		
EDU	187	Teaching and Learning for All	FA			
EDU	216	Foundations of Education	FA			
EDU	221	Children With Exceptionalities	FA			
EDU	234	Infants, Toddlers, and Twos		SP		
EDU	250	Teacher Licensure Preparation		SP		
EDU	252	Math & Science Activities			SU	Odd-numbered years
EDU	261	Early Childhood Admin I	FA			•
EDU	262	Early Childhood Admin II	FA			
EDU	271	Educational Technology		SP		Odd-numbered years
EDU	279	Literacy Development and Instruction		SP		•
EDU	280	Language/Literacy Experiences		SP		
EDU	284	Early Childhood Capstone Practicum		SP		
ELC	113	Residential Wiring	FA			
ELC	115	Industrial Wiring		SP		
ELC	118	National Electrical Code	FA			
ELC	119	NEC Calculations	FA			
ELC	128	Intro to PLC		SP		
ELC	131	Circuit Analysis	FA			
ELC	131A	Circuit Analysis I Lab	FA			
ELC	213	Instrumentation	FA			
ELN	133	Digital Electronics	FA			
ELN	231	Industrial Controls		SP		
ELN	233	Microprocessor Systems		SP		
EMS	110	EMT	FA			
EMS	122	EMS Clinical Practicum I		SP		
EMS	130	Pharmacology		SP		
EMS	131	Advanced Airway Management		SP		
EMS	160	Cardiology I		SP		
EMS	220	Cardiology II			SU	
EMS	221	EMS Clinical Practicum II			SU	
EMS	231	EMS Clinical Practicum III	FA			
EMS	235	EMS Management		SP		
EMS	240	Patients with Special Challenges		-	SU	
			2.42			

<b>Prefix</b> EMS	<b>Course</b> # 241	Title EMS Clinical Practicum IV	Semester	Offered SP	ı	Notes
EMS	250	Medical Emergencies	FA			
EMS	260	Trauma Emergencies	FA			
EMS	270	Lifespan Emergencies			SU	
EMS	285	EMS Capstone			SU	
EGR	125	Application Software for Tech	FA			
EGR	150	Intro to Engineering		SP		
EGR	220	Engineering Statistics				Offered as needed
ENG	002	Transition English	FA	SP	SU	
ENG	011	Writing and Inquiry Support	FA	SP	SU	
ENG	101	Applied Communications I	FA			
ENG	111	Writing and Inquiry Support	FA	SP	SU	
ENG	112	Writing/Research in the Disciplines	FA	SP	SU	
ENG	125	Creative Writing				Offered as needed
ENG	231	American Literature I	FA		SU	
ENG	232	American Literature II		SP		
ENG	241	British Literature I	FA			
ENG	242	British Literature II		SP		
ENG	272	Southern Literature				Offered as needed
ENG	273	African-American Literature			SU	
EPT	120	Sociology of Disaster	FA			
EPT	124	EM Services Law and Ethics	FA			
EPT	130	Mitigation & Preparedness		SP		
EPT	140	Emergency Management	FA			
EPT	150	Incident Management		SP		
EPT	210	Response and Recovery	FA			
EPT	220	Terrorism and Emergency Management	FA			
EPT	275	Emergency Operations Center Management		SP		
FIP	110	Fire Protection/Restaurants & Hotels				Offered as needed
FIP	120	Introduction to Fire Protection	FA			
FIP	124	Fire Protection and Public Education		SP		
FIP	132	Building Construction				Offered as needed
FIP	146	Fire Protection Systems				Offered as needed
FIP	162	Firefighter Safety and Wellness				Offered as needed
FIP	176	HazMat: Operations				Offered as needed
FIP	180	Wildland Fire Behavior				Offered as needed
FIP	184	Wildland Fire Safety				Offered as needed
FIP	220	Fire Fighting Strategies				Offered as needed
FIP	228	Local Government Finance	FA			
FIP	229	Fire Dynamics and Combust.				Offered as needed
FIP	232	Water and Hydraulics Dist.				Offered as needed
FRE	111	Elementary French I				Offered as needed
FRE	112	Elementary French II				Offered as needed
GEL	111	Geology				Offered as needed
GRO	120	Gerontology				Offered as needed
GRD	110	Typography I		SP		
GRD	121	Drawing Fundamentals I	FA			
GRD	131	Illustration I		SP		
GRD	141	Graphic Design I	FA	SP		
GRD	142	Graphic Design II		SP		

Prefix	Course #	Title	Semester	Offer	ed	Notes
GRD	151	Computer Design Basics	FA			
GRD	152	Compter Design Tech I		SP		
GRD	160	Photo Fundamentals I			SU	
GRD	241	Graphic Design III	FA			
GRD	242	Graphic Design IV		SP		
GRD	249	Advanced Design Practice		SP		
GRD	263	Illustrative Imaging	FA			
GRD	280	Portfolio Design			SU	
GRO	120	Gerontology	FA			
HEA	110	Personal Health/Wellness	FA	SP		
HIT	110	Fundamentals of HIM	FA	SP		SP only for Advanced Placement
HIT	112	Health Law and Ethics			SU	
HIT	114	Health Data Sys/Standards	FA	SP		
HIT	122	Professional Practice Experience I	FA			
HIT	124	Professiona Practice Experience II	FA		SU	
HIT	211	ICD Coding		SP		
HIT	213	Inpt Proc Coding & Reporting	FA			
HIT	214	CPT/Other Coding Systems		SP		
HIT	215	Revenue Cycle Management	FA	SP	SU	SU only for Advanced Placement
HIT	217	Quality & Data Analysis		SP		
HIT	218	Management Principles in HIT	FA			
HIT	220	Electronic Health Records	FA			
HIT	221	Lifecycle of EHR		SP		
HIT	222	Professional Practice Experience III	FA	SP		FA only for Advanced Placement
HIT	225	Healthcare Informatics	FA			
HIT	226	Principles of Disease	FA			
HIT	227	Informatics Project Management		SP		
HIT	280	Professional Issues		SP		
НМТ	110	Intro to Healthcare Management	FA			
HMT	210	Medical Insurance	FA			
НМТ	211	Longterm Care Admin.		SP		
HMT	212	Management of Healthcare Organizations	FA			
HMT	220	Healthcare Financial Management (1st 8 week)		SP		
HMT	225	Practice Mgmt. Simulation (2nd 8 week)		SP	SU	
HIS	111	World Civilizations I	FA		SU	
HIS	112	World Civilizations II		SP	SU	
HIS	131	American History I	FA		SU	
HIS	132	American History II		SP	SU	
HUM	110	Technology and Society				Offered as needed
HUM	115	Critical Thinking				Offered as needed
HUM	120	Cultural Studies			SU	
HUM	122	Southern Culture	FA	SP	SU	
HYD	110	Hydraulics/Pneumatics I	FA			
ISC	112	Industrial Safety	FA			
ISC	121	Environmental Health & Safety			SU	
ISC	130	Intro to Quality Control		SP		
ISC	210	Oper & Prod Planning		SP		
LDD	112	Intro Light Duty Diesel				Offered as needed
LDD	181	Ldd Fuel Systems				Offered as needed
MAC	114	Introduction to Metrology		SP		

<b>Prefix</b> MAC	Course #	Title Intro to CNC	Semester FA	Offered	Notes
MAC	122	CNC Turning		SP	
MAC	124	CNC Milling		SP	
MAC	141	Machining Applications I	FA		
MAC	142	Machining Applications II		SP	
MAC	143	Machining Applications III	FA		
MAC	151	Machining Calculations	FA		
MAC	152	Advanced Machining Calculations		SP	
MAC	222	Advanced CNC Turning	FA		
MAC	224	Advanced CNC Milling		SP	
MAC	231	CAM: CNC Turning	FA		
MAC	232	CAM: CNC Milling		SP	
MAC	247	Production Tooling	FA		
MNT	110	Introduction to Maintenance Procedures		SP	
MNT	160	Industrial Fabrication			Offered as needed
MAT	003	Transition Math	FA	SP SU	J
MAT	010	Math Measurement and Literacy Support		SP SU	J
MAT	021	Algebra/Trigonometry I Support		SU	J
MAT	043	Quantitative Literacy Support	FA	SP SU	J
MAT	052	Statistical Methods I Support	FA	SP SU	J
MAT	071	PreCalculus Algebra Support	FA	SP	
MAT	110	Math Measurement & Literacy		SP SU	J
MAT	121	Algebra and Trigonometry I		SU	J
MAT	122	Algebra/Trigonometry II			Offered as needed
MAT	143	Quantitative Literacy	FA	SP SU	J
MAT	152	Statistical Methods I	FA	SP SU	J
MAT	171	PreCalculus Algebra	FA	SP SU	
MAT	172	PreCalculus Trigonometry		SP SU	J
MAT	271	Calculus I	FA	SU	J
MAT	272	Calculus II	FA	SP	
MAT	273	Calculus III	FA	SU	
MAT	280	Linear Algebra			Offered as needed
MAT	285	Differential Equations		SP	
MEC	130	Mechanisms	FA		
MEC	142	Physical Metallurgy	FA		
MEC	161	Manufacturing Processes I		SP	
MED	121	Medical Terminology I	FA	SP SU	
MED	122	Medical Terminology II	FA	SP SU	J Offered as needed
MKT	120	Principles of Marketing		SP	
MKT	121	Retailing	FA		
MKT	122	Visual Merchandising			Offered as needed
MKT	123	Fundamentals of Selling	FA		
MKT	220	Advertising and Sales Promotion		SU	J
MKT	223	Customer Service	FA		
MKT	224	International Marketing		SP	
MKT	225	Marketing Research		SP	
MKT	227	Marketing Applications		SU	
MKT	230	Public Relations			Offered as needed
MKT	232	Social Media Marketing	FA		
MNT	110	Intro to Maintenance Procedures	FA		

Prefix MUS	Course #	Title Music Appreciation	Semeste	r Offer SP	ed SU	Notes
MUS	112	Introduction to Jazz				Offered as needed
MUS	210	History of Rock Music				Offered as needed
NAS	101	Nurse Aide I	FA	SP	SU	
NAS	102	Nurse Aide II	FA	SP		
NET	125	Networking Basics	FA			
NOS	110	Operating Systems Concepts				Offered as needed
NOS	120	Linux/UNIX Single User	FA			
NOS	130	Windows Single User		SP		
NOS	230	Windows Admin I	FA			
NUR	101	Practical Nursing I	FA			
NUR	102	Practical Nursing II		SP		
NUR	103	Practical Nursing III			SU	
NUR	111	Intro to Health Concepts	FA			
NUR	112	Health Illness Concepts		SP		
NUR	113	Family Health Concepts	FA			
NUR	114	Holistic Health Concepts			SU	
NUR	211	Health Care Concepts		SP		
NUR	212	Health System Concepts	FA			
NUR	213	Complex Health Concepts		SP		
NUR	214	Nursing Transition Concepts		SP		
OMT	112	Material Management		SP		
OMT	260	Issues in Operation Management			SU	
OST	122	Office Computations	FA			
OST	131	Keyboarding	FA	SP		
OST	134	Text Entry & Formatting	FA	SP		
OST	135	Advanced Text Entry & Format	FA	SP		
OST	136	Word Processing	FA	SP	SU	
OST	149	Medical Legal Issues		SP		
OST	153	Office Finance Solutions/Quickbooks		SP		
OST	164	Office Editing	FA			
OST	184	Records Management		SP		
OST	223	Admin Office Transcription I		SP		
OST	236	Advanced Word/Information Processing	FA			
OST	247	Procedure Coding		SP		
OST	248	Diagnostic Coding		SP		
OST	249	Medical Coding Certification			SU	
OST	250	Long Term Care Coding	FA			
OST	286	Professional Development		SP	SU	
OST	289	Office Systems Management		SP	SU	
PCI	264	Process Control with PLCs	FA			
PED	110	Fit and Well for Life	FA	SP	SU	
PED	111	Physical Fitness				Offered as needed
PED	113	Aerobics I				Offered as needed
PED	117	Weight Training I	FA			<del></del>
PED	120	Walking for Fitness	FA	SP		
PED	128	Golf - Beginning				Offered as needed
PED	130	Tennis - Beginning				Offered as needed
PED	139	Bowling - Beginning				Offered as needed
PED	152	Swimming - Beginning				Offered as needed

Prefix PED	Course #	Title Water Aerobics	Semes	Semester Offered		Notes Offered as needed	
PED	174	Wilderness Pursuits				Offered as needed	
PED	219	Disc Golf			SU	Offered as freeded	
PHI	210	History of Philosophy			30	Offered as needed	
PHI	215	Philosophical Issues				Offered as needed	
PHI	240	Introduction to Ethics				Offered as needed	
PHO	110	Fundamentals of Photography	FA	SP		Offered as freeded	
		<b>5</b> 1 7		31			
PHO	113	History of Photography	FA	CD.			
PHO	115	Basic Studio Lighting		SP			
PHO	120	Intermediate Photography	FA	SP			
PHO	132	Small-Format Photography		SP			
PHO	139	Intro to Digital Imaging	FA	SP			
PHO	140	Digital Photo Imaging I	FA	SP			
PHO	150	Portfolio Devleopment I		SP			
PHO	180	Creative Problem Solving				Offered as needed	
PHO	216	Documentary Photography				Offered as needed	
PHO	217	Photojournalism I		SP			
PHO	220	Business of Photography		SP			
PHO	222	Video Production	FA				
PHO	224	Multimedia Production	FA				
PHO	226	Portraiture	FA				
PHO	235	Commercial Photography		SP			
PHY	110	Conceptual Physics				Offered as needed	
PHY	110A	Conceptual Physics Lab				Offered as needed	
PHY	131	Physics - Mechanics		SP			
PHY	151	College Physics I				Offered as needed	
PHY	152	College Physics II				Offered as needed	
PHY	251	General Physics I	FA				
PHY	252	General Physics II		SP			
PLA	110	Introduction to Plastics		SP			
POL	120	American Government	FA	SP			
POL	130	State & Local Government	FA				
POL	210	Comparative Government				Offered as needed	
PSY	118	Interpersonal Psychology				Offered as needed	
PSY	150	General Psychology	FA	SP	SU		
PSY	239	Psychology of Personality		SP			
PSY	241	Developmental Psych	FA	SP	SU		
PSY	244	Child Development I				Offered as needed	
PSY	245	Child Development II				Offered as needed	
PSY	281	Abnormal Psychology	FA		SU		
REF	117	Refrigeration Controls			SU		
REL	110	World Religions				Offered as needed	
REL	211	Intro to Old Testament	FA			Offered as needed	
REL	212	Intro to New Testament		SP		Offered as needed	
SEC	160	Security Administration I	FA				
SEC	260	Security Administration II		SP			
SOC	210	Introduction to Sociology	FA	SP	SU		
SOC	213	Sociology of the Family	FA	SP	SU		
SOC	220	Social Problems				Offered as needed	
SOC	225	Social Diversity	FA				

Prefix	Course #	Title	Semester	Offered	I	Notes
SOC	242	Sociology of Deviance				Offered as needed
SPA	110	Introduction to Spanish				Offered as needed
SPA	111	Elementary Spanish I	FA	SP		
SPA	112	Elementary Spanish II		SP		
SPA	181	Spanish Lab I	FA	SP		
SPA	182	Spanish Lab II		SP		
SPA	211	Intermediate Spanish I	FA			
SPA	212	Intermediate Spanish II		SP		
SPA	281	Spanish Lab 3	FA			
SPA	282	Spanish Lab 4		SP		
TRN	111	Chassis Maintenance/Light Repair		SP		Odd-numbered years
TRN	112	Powertrain Maintenance/Light Repair		SP		Odd-numbered years
TRN	130	Intro to Sustainable Tran		SP		Odd-numbered years
TRN	140	Trans Climate Control			SU	Even-numbered years
TRN	140A	Trans Climate Control Lab			SU	Even-numbered years
TRN	170	PC Skills for Transportation	FA			Odd-numbered years
TRN	180	Basic Welding for Transportation	FA			Even-numbered years
WEB	111	Intro to Web Graphics	FA			
WEB	115	Web Markup and Scripting	FA			
WEB	120	Intro Internet Multimedia		SP		
WEB	140	Web Development Tools	FA			
WEB	151	Mobile Application Development		SP		
WEB	182	PHP Programming	FA			
WEB	210	Web Design	FA			
WEB	214	Social Media		SP		
WEB	225	Content Management Systems		SP		
WEB	250	Database Driven Websites		SP		
WEB	285	Emerging Web Technologies	FA			
WEB	287	Web E-Portfolio		SP		
WLD	110	Cutting Processes		SP		
WLD	112	Basic Welding Processes	FA			
WLD	115	SMAW (Stick) Plate		SP		
WLD	116	SMAW (Stick) Plate/Pipe	FA			
WLD	121	GMAW (MIG) FCAW/Plate	FA			
WLD	131	GTAW (TIG) Plate		SP		
WLD	141	Symbols & Specifications	FA			
WLD	143	Welding Metallurgy		SP		
WLD	151	Fabrication I		SP		
WLD	261	Certification Practices		SP		
WBL	111	Work-Based Learning I	FA	SP	SU	
WBL	112	Work-Based Learning I	FA	SP	SU	
WBL	113	Work-Based Learning I	FA	SP	SU	
WBL	114	Work-Based Learning I	FA	SP	SU	
WBL	121	Work-Based Learning II	FA	SP	SU	
WBL	122	Work-Based Learning II	FA	SP	SU	
WBL	123	Work-Based Learning II	FA	SP	SU	
WBL	124	Work-Based Learning II	FA	SP	SU	
WBL	131	Work-Based Learning III	FA	SP	SU	
WBL	132	Work-Based Learning III	FA	SP	SU	
WBL	133	Work-Based Learning III	FA	SP	SU	
			240			

Prefix	Course #	Title	Semest	red	Notes	
WBL	134	Work-Based Learning III	FA	SP	SU	
WBL	211	Work-Based Learning IV	FA	SP	SU	
WBL	212	Work-Based Learning IV	FA	SP	SU	
WBL	213	Work-Based Learning IV	FA	SP	SU	
WBL	214	Work-Based Learning IV	FA	SP	SU	

## Course Descriptions

Classes labled "\*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

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 None

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

Corequisites:

2 2 3 Prerequisites: 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.

None

#### 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 ACC 115 or ACC 120

Prerequisites: ACC 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 book-keeping 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
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: 3 2

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 Acct

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 Class/Lab/Credit or Class/Lab/Exp./Credit

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 Serves

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

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

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

Class/Lab/Credit or Class/Lab/Exp./Credit 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

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 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 Class/Lab/Credit or Class/Lab/Exp./Credit

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 analyis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### AHR 135 Transport Refrigeration

2 6

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

0

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

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

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 watersource 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 Class/Lab/Credit or Class/Lab/Exp./Credit

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

Prerequisites: None Corequisites: None

1

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

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

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.

#### Alternative Transportation Tech.

ATT 115 Green Trans Safety & Service

2. Prerequisites: None Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

This course covers workplace safety, hazardous material and environmental regulation relevant to electric, hybrid and alternative fueled vehicles. Topics include safety of high voltage vehicle systems, gaseous fuel systems and alternative liquid fuels. Upon completion, students should be able to demonstrate safe work practices, utilize appropriate shop tools and explain government regulations associated with alternative transportation.

#### ATT 125 Hybrid-Electric Trans.

2 4 4 Take TRN-120 Prerequisites:

Corequisites:

This course covers the theory and operation of hybridelectric drive vehicles. Topics include maintenance, diagnostics, repair and safety procedures for electrically propelled and hybrid vehicles. Upon completion, students should be able to perform diagnostics, maintenance and repair hybrid-electric drive vehicles.

#### **ATT 140 Emerging Trans. Tech**

Prerequisites: None Corequisites: None

This course covers emerging technologies in the automotive industry and diagnostic procedures associated with those technologies. Topics include exploring new technologies, diagnostic tools, methods and repairs. Upon completion, students should be able to demonstrate practical skills applicable to emerging automotive technologies.

#### Art

#### ART 111 Art Appreciation

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

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

0 3 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

2

Class/Lab/Credit or Class/Lab/Exp./Credit 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

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

3

## ASL 111 Elementary ASL I

3 0

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

### Class/Lab/Credit or Class/Lab/Exp./Credit

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 None

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

Class/Lab/Credit or Class/Lab/Exp./Credit 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 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 completion, 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

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

0 3 1

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

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,

Class/Lab/Credit or Class/Lab/Exp./Credit

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

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 trouble-shooting. 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

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 1 Lab

0 3

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 AUT 181

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

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

Class/Lab/Credit or Class/Lab/Exp./Credit

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

3 3

Prerequisites: None Corequisites: None

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, 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 transferrability 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 stystems 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 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 an in-depth understanding of principles of anatomy in dephysiology 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

Class/Lab/Credit or Class/Lab/Exp./Credit

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

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 premajor and/or elective course requirement.

## Blueprint Reading

### BPR 111

Print Reading

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

- •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

Prerequisites: BPR 121or 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

Class/Lab/Credit or Class/Lab/Exp./Credit fabrication, construction, and assembly.

## BPR 135 Schematics & Diagrams

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

Prerequisites: None Corequisites: None

This course introduces the student to the legal and 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

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: 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.

#### Human Resource Management **BUS 153**

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

ACC 120 Prerequisites: Corequisites:

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 Prerequisites: None Corequisites: None

## Class/Lab/Credit or Class/Lab/Exp./Credit

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**

0 3 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

0

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:

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 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-today 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

0 None

Prerequisites: 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.

#### Ethics and High Technology CCT 112

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, endjustifying-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. 2

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.

4

#### CCT 231 **Technology Crimes and Law**

3 0

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

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:

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

Capstone Project **CCT 289** 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 DMA 040

Prerequisites: 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 4

CHM 131 and CHM 131A or CHM Prerequisites:

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

MAT 003 Prerequisites: 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

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.

#### Organic Chemistry I CHM 251

Prerequisites:

Corequisites:

3 3 4 CHM 152 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

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**

0 3 CHM 252 Prerequisites: Corequisites:

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

CHM 252 Prerequisites: CHM 271 Corequisites:

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** 

2. Prerequisites: None

Corequisities: 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.

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

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**

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.

#### CIC 111 Introd. to Criminal Justice

0 3 None

Prerequisites: 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. TThis course has been approved for transfer under the ICAA as a premajor and/or elective course requirement.

#### CJC 112 Criminology

0 3

Prerequisites: None Corequisites: None

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime 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

2 2

Prerequisites: 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 None

Prerequisites: 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 Class/Lab/Credit or Class/Lab/Exp./Credit

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**

0 3 None

Prerequisites: 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.

### Criminal Law

0 3 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**

0 3 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 judicial procedures, and the admissibility of evidence.

#### CJC 141 Corrections

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

None Prerequisites:

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

Class/Lab/Credit or Class/Lab/Exp./Credit various crime scenes and demonstrate the appropriate techniques.

#### CJC 160 Terrorism: Underlying Issues

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.

#### **CIC 161** Intro. to Homeland Security

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

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 other related topics. Upon completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal iustice situations.

#### Constitutional Law CJC 231

3 0 3

None Prerequisites: 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 Tranfer: This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition. This couse 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.

0

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 Tranfer: This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition.

COM 231 **Public Speaking** 

0 None

Prerequisites: 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 None Prerequisites: COS 112 Corequisites:

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

COS 112 Salon I 0

24 None Prerequisites: COS 111 Corequisites:

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

8

COS 113 Cosmetology Concepts II

4 0 4

COS 111 and COS 112 Prerequisites:

competently demonstrate salon services.

Corequisites:

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

24 8

COS 111 and COS 112 Prerequisites:

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 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

COS 111 and COS 112 Prerequisites:

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

COS 111 and COS 112 Prerequisites:

Corequisites:

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

21 7

COS 111 and COS 112 Prerequisites:

Corequisites:

Class/Lab/Credit or Class/Lab/Exp./Credit

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

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

18 6 0

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 competently perform nail care, including manicures, pedicures, surface manipulations, decorating and artificial applications in a salon setting.

COS 125 Esthetics Concepts II

2 0

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

18 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

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 None

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.

## 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

### Class/Lab/Credit or Class/Lab/Exp./Credit

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

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 demonostrate 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

21 7

Prerequisites: Cosmetology License and six months experience as a licensed cosmetologist 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.* 

Class/Lab/Credit or Class/Lab/Exp./Credit

## 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

## Computer Technology Integration

course requirement. This course available through VLC.

## CTI 110 Web, PGM and Db Management

2 2 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

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

#### CTI 140 Virtualization Concepts

1 4 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

None

3 0 3 Prerequisites: None

Corequisites:

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

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.

#### Spreadsheet **CTS 130**

2 2

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.

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### CTS 285 Systems Analysis & Design

0 CIS 115 Prerequisites: 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

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**

Corequisites:

2 3 3 Prerequisites: CIS 110 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

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

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

## Drafting

**DFT 119** Basic CAD

1 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 None

Prerequisites: 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 None

Prerequisites: 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 Prerequisites: None None Corequisites:

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 None

Prerequisites: 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 Class/Lab/Credit or Class/Lab/Exp./Credit 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 community 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 cultur-

Class/Lab/Credit or Class/Lab/Exp./Credit
ally, linguistically, and ability diverse. *This course has*been approved for transfer under the CAA and ICAA

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

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 child-hood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion,

Class/Lab/Credit or Class/Lab/Exp./Credit 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

ren

3 0 None

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

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 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 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 EDU 119

Prerequisites: EDU 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 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 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:

rerequisites 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/

Class/Lab/Credit or Class/Lab/Exp./Credit

### EDU 222 Learners W/ Behavior Disorders

3 0 3

Prerequisites Take one set:

or elective course requirement.

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)

Prerequisites: 3 0 3

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 234 Infants, Toddlers, and Twos

3 0 3 Take EDU-119

Prerequisites Take EDU-1 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

## 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 developmental 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 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

Prerequisites: 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

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 child-

Class/Lab/Credit or Class/Lab/Exp./Credit hood programs, develop strategies for advocacy and integrate community into programs.

#### EDU 271 **Educational Technology** 2 2 3

Prerequisites 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

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, researchbased 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

3 0 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 Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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

Take One Set: Prerequisites

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

Take One Set:

Prerequisites 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

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

Class/Lab/Credit or Class/Lab/Exp./Credit list, discuss, and explain advanced current topics and issues surrounding school-aged populations.

## Electricity

## ELC 111 Intro to Electricity

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.

#### DC/AC Electricity **ELC 112** 6

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

#### 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

Class/Lab/Credit or Class/Lab/Exp./Credit

- •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

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

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

2 2 None

Prerequisites: 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.

#### Intro to PLC **ELC 128** 2 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

- •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 controlThis 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

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

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

None

Prerequisites: Corequisites: ELC 131

This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric, electronic, and other instruments. Upon completion,

Class/Lab/Credit or Class/Lab/Exp./Credit students should be able to install, maintain, and calibrate instrumentation.

## **Electronics**

#### **ELN 131 Analog Electronics**

3 3

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.

#### **Digital Electronics ELN 133** 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

Class/Lab/Credit or Class/Lab/Exp./Credit to determine, by the configuration, the function of common analog circuits and troubleshoot circuits based on applications.

#### **ELN 140** Semiconductor Devices

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**

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

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

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

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

3 1

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.

266

Class/Lab/Credit or Class/Lab/Exp./Credit 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

Take EMS 110 Prerequisites:

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

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.

#### Cardiology I EMS 160

2. 3 0 3

Take EMS 110 Prerequisites: 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:

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

Take EMS-221 Prerequisites:

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

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.

## Patients With Special Challenges 1 2 0 2 **EMS 240**

Take All: EMS-122 and EMS-130 Prerequisites:

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

### 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:

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

Take All: EMS-122 and EMS-130 Prerequisites:

Corequisites:

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

## Engineering

EGR 125 Appl Software for Tech

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.

### 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**

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

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

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 writing strategies.
- 4. Demonstrate the critical use and examination of

Class/Lab/Credit or Class/Lab/Exp./Credit 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 ENG 111

Corequisites: None

Prerequisites:

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 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

Class/Lab/Credit or Class/Lab/Exp./Credit

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

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 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 disasterrelated 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

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 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.

3

#### **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 within the National Incident Management System.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### Response and Recovery **EPT 210**

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.**

0 None

Prerequisites: 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 None

Prerequisites: 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

None Prerequisites: 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 dire and emergency
- 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

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.

#### **Building Construction** FIP 132

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
- 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 3 2

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

0

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.

#### HazMat: Operations FIP 176

0

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 of 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 stanClass/Lab/Credit or Class/Lab/Exp./Credit

dard 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 None

Prerequisites: Corequisites: None

This course covers safety principles used when working in the wildland fire environment referenced in NFPA standard1143. Emphasis is place 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

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 attach methods for appropriate conditions and scenarios.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### FIP 228 Local Govt. Finance

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: 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

None

Prerequisites: 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

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 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**

Prerequisites: None Corequisites: None

3

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 the earth system.

## Gerontology

**GRO 120 Gerontology** 

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

Class/Lab/Credit or Class/Lab/Exp./Credit completion, students should be able to recognize the aging process and its psychological, social, and physical aspects.

## Graphic Design

GRD 110 Typography I

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

3 0 Prerequisites: 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 None

Prerequisites: 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

3 2 1

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

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 visual elements to projects.

#### GRD 142 Graphic Design II

4 4

ART 121, DES 135, or GRD 141 Prerequisites:

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

GRD 151 Computer Design Basics

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

4 3

GRD 151 Prerequisites: 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

4 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

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

4 4

DES 136 or GRD 142 Prerequisites:

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 4

GRD 241 Prerequisites:

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** 

9 1

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

GRD 151 Prerequisites: 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 audiovideo, and copyright issues. Upon completion, students should be able to design and produce multimedia presentations.

#### **GRD 280** Portfolio Design

2 4 4

GRD 142 and GRD 152 or GRA 152 Prerequisites:

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 None

Prerequisites:

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

GRD 142 and GRD 152 Prerequisites:

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

0 3

Prerequisites: None Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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

## Health Information Technology

#### HIT 110 Intro to Healthcare and HIM

0 0

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.

#### Health Data Sys/Standards HIT 114

2 3 0

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

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.

#### Prof Practice Exp II HIT 124

0 0 3

Prerequisites: None Corequisites:

272

Class/Lab/Credit or Class/Lab/Exp./Credit

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

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

None

1 3 0 2

Prerequisites: None

Corequisites:

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 reimbursement methodologies.

#### **HIT 214** OP Procedure Coding/Reporting

3 0 2 1 HIT 211

Prerequisites:

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

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 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

3 0

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

0 0

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 Electronic Health Records**

1 2

Prerequisites: None Corequisites: None

This course covers EHR systems, design, implementation and application. Topics include EHR, informatics, information governance, health information exchange (HIE), speech &

Class/Lab/Credit or Class/Lab/Exp./Credit 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

0 2

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.

#### Prof Practice Exp III HIT 222

0 6 HIT 122

Corequisites:

Prerequisites:

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**

3 0

Prerequisites: None

Corequisites:

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 recommendations.

#### HIT 226 Pathophysiology & Pharmacology

3 0 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.

#### Informatics Project Mgt. HIT 227

2 0

Prerequisites: None Corequisites: None Class/Lab/Credit or Class/Lab/Exp./Credit

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**

0 0 HIT 211

Prerequisites: 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.

0

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 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 thirdparty claims forms.

3

#### **HMT 211** Longterm Care Admin.

0

Prerequisites: None Corequisites: None

This course introduces the administration of longterm 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 cul $tural\ developments\ in\ pre-modern\ world\ civilizations.$ This course has been approved to satisfy the Comprehensive Articulation Agreement general education core requirement in social/behavioral sciences.

#### HIS 112 World Civilizations II

0

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 prehistory 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

0

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 Class/Lab/Credit or Class/Lab/Exp./Credit

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

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

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.the characteristics that distinguish Southern culture. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.

3

## **HUM 122 Southern Culture**

3 0

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

- 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

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 2

0 Prerequisites: None

Corequisites: None

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lockout/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

Prerequisites: 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

None

Prerequisites:

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

0

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 budget-

ing. 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.

### Light Duty Diesel LDD 112 Intro Light Duty Diesel

2

Prerequisites: None Corequisites: None

This course covers the history, evolution, basic design and operational parameters for light-duty diesel (LDD) engines used in on-road applications. Topics include familiarization with the light-duty diesel, safety procedures, engine service and maintenance procedures, and introduction to combustion and emission chemistry. Upon completion, students should be able to describe the design and operation of the LDD, perform basic service operations, and demonstrate proper safety procedures.

#### LDD 181 LDD Fuel Systems

6

Prerequisites: None Corequisites: None

This course covers the light-duty diesel fuel delivery systems in on-road applications including hydraulic electronically controlled unit injectors, commonrail, mechanical pumps, and emerging technologies. Topics include diesel combustion theory, fuel system components, electronic and mechanical controls, and fuel types and chemistries that are common to the light-duty diesel engines. Upon completion, students should be able to demonstrate skills necessary to inspect, test, and replace fuel delivery components using appropriate service information and tools.

## Machining

#### **MAC 114** Introduction to Metrology

2 0 2

Prerequisites: None

Corequisites: None

This course introduces the care and use of precision measuirng 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

0

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**

3

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

Class/Lab/Credit or Class/Lab/Exp./Credit completion, students should be able to manufacture simple parts using CNC turning centers.

#### **CNC Milling MAC 124**

1 3

Prerequisites: 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 None

Prerequisites: Corequisites

This course provides an introduction to a variety of material-working processes that are common to the machining industry. Topics include safety, processspecific 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 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

6

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** 2

1 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

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### **MAC 222** Advanced CNC Turning 3

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

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.

#### **CAM: CNC Turning** MAC 231

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**

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 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
- •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

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

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### **MAT 043** Quantitative Literacy

Support

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

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 Alegebra Support

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

Take one set: Prerequisites:

Set 1: DMA-010, DMA-020, and DMA-030

Set 2: DM A-025 Set 3: MAT-003

Set 4: BSP-4003

Take MAT-010 Corequisites:

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

Class/Lab/Credit or Class/Lab/Exp./Credit

- 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 3

Take one set: Prerequisites:

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

Take MAT-021 Corequisites:

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.

#### Quantitative Literacy **MAT 143**

2 2 3

Take One Set: Prerequisites:

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,

Class/Lab/Credit or Class/Lab/Exp./Credit

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
- 5. Analyze sample data to draw inferences about a population parameter

 $\,$  6. 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

- 1. Use analytical, graphical, and numerical representations to solve absolute value, radical, polynomial, rational, exponential, and logarithmic equations with both real and complex solutions.
- 2. Use analytical, graphical, and numerical representations to solve absolute value, polynomial and rational inequalities with real solutions.
- 3. Use analytical, graphical, and numerical representations to analyze absolute value, radical, polynomial, rational, exponential and logarithmic functions with both real and complex zeros.
- 4. Use multiple methods to solve problems involving systems of equations and apply to decomposing partial fractions.
- 5. Construct the composition and inverse of functions. 6. 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

- 1. 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.
- 2. Use multiple methods to solve problems involving trigonometric equations, right triangles, and oblique triangles.

- 3. Demonstrate knowledge of vector definitions and perform vector operations.
- Convert equations and graphs between rectangular and polar coordinate systems, and apply to complex numbers.
- 5. Use multiple representations to define, construct and analyze conic sections.
- 6. Create, graph, and analyze parametric equations.

## MAT 271 Calculus I

3 2 4
Prerequisites: MAT 172

Corequisites: MAI I

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.

## 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.
- 2. Use derivatives to analyze and graph algebraic and transcendental functions.
- 3. 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.
- 4. Apply the definition of indefinite integral to solve basic differential equations.
- 5. Apply the definition of definite integral to evaluate basic integrals.
- 6. Use the fundamental theorem of calculus to evaluate integrals involving algebraic and transcendental functions.

4

## MAT 272 Calculus II

2

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

- 1. 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.
- 2. Evaluate proper and improper integrals using various integration techniques.
- 3. Analyze the convergence and divergence of infinite sequences and series and find the Taylor and McLaurin representations for transcendental functions.
- 4. Use differentiation and integration to analyze the graphs of polar form equations and parametric form equations

- 5. Solve separable and first-order linear differential
- 6. Analyze and graph conic sections using calculus techniques.

MAT 273 Calculus III 3 2 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

- 1. Perform operations with vectors in two and three dimensional space and apply to analytic geometry.
- 2. Differentiate and integrate vector-valued functions and apply calculus to motion problems in two and three dimensional space.
- 3. Determine the limits, derivatives, gradients, and integrals of multivariate functions.
- 4. Solve problems in multiple integration using rectangular, cylindrical, and spherical coordinate systems. 5. 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.
- 6. Demonstrate proficiency in using CAS technology to analyze, solve and interpret the various applications.

# Linear Algebra 2 2

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

- 1. Use analytical and graphical representations to apply vector operations in multiple-dimensions.
- 2. 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.
- 3. Use eigenvalues, eigenvectors and diagonalization to solve problems in appropriate situations.
- 4. Use matrix operations and linear transformations to solve problems in appropriate situations.
- 5. Demonstrate knowledge of orthogonal projections and orthogonal complements of subspaces, and apply to appropriate situations.
- 6. 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.
- 7. 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### MAT 285 **Differential Equations** 2. 2.

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, secondorder, and higher-order homogeneous and nonhomogeneous differential equations by manual and technology-based methods.
- 2. Identify and apply initial and boundary values to find particular solutions to first-order, secondorder, and higher order homogeneous and nonhomogeneous 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.
- 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

MEC 111 Prerequisites:

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

Prerequisites: None Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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 3 2

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:

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.
- 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

their pathological disorders. (\*VLC)

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

## MED 122 Medical Terminology II

3 0 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

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

- 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

Competencies

Student Learning Outcomes

- 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 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 in
a marketing plan creating social media marketing

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.

· ·

·Student Learning Outcomes

Competencies

- 1. Integrate different social media techniques into a marketing plan.
- 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 : None

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

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

4 3

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

High school diploma or GED and Prerequisites: currently listed as NA I with State of North Carolina

Corequisites:

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

Class/Lab/Credit or Class/Lab/Exp./Credit

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 0

NAS 101 Prerequisites: 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

3

NET 125 **Networking Basics** 

4

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

3

Prerequisites: None

Corequisites: None

This course introduces students to a broad range of operating system concepts, including installation and maintenance. Emphasis is place 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 None

Prerequisites: 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 Prerequisites: None

Corequisites: None Class/Lab/Credit or Class/Lab/Exp./Credit

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

None Prerequisites: 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

6 6 11

Admission to the P.N.E. Program Prerequisites: 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 evidencebased 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

0 9 10

NUR 101, BIO 168, PSY 150 Prerequisites:

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** 

0 9

NUR 102 Prerequisites: 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.

Intro to Health Concepts 4 6 6 8 NUR 111

Admission to ADN Program Prerequisites: BIO 168, PSY 150, ACA 115 Corequisites: 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 NUR 111

Prerequisites: 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

0 6 5

NUR 111, NUR 112, NUR Prerequisites: 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 NUR 111, NUR 112, NUR Prerequisites:

ENG 111, PSY 241 Corequisites:

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 Prerequisites: NUR 111, NUR 112

BIO 169 Corequisites:

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

Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211

BIO 175, ENG 112 Corequisites:

This course is designed to further develop the concepts within the three domains of the individual, Class/Lab/Credit or Class/Lab/Exp./Credit

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

3 15 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-wellnessillness, 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 Admission to Advanced Prerequisites: Placement Track

PSY 241, BIO 169 Corequisites:

\*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-wellnessillness. Upon completion, students should be able to

## Nutrition

provide safe nursing care incorporating the concepts

**NUT 110** Nutrition

3 0

Prerequisites: None

identified in this course.

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

3 0

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

Competencies

Student Learning Outcomes

- 1. Identify appropriate strategies for procurement of
- 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

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

ISC 121, ISC 210, OMT 112, and Prerequisites:

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** 

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

Prerequisites: 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

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.

Text Entry & Formatting **OST 134** 

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).

Adv Text Entry & Format OST 135

 $3 \quad 2 \quad 4$ 

OST 131, OST 134 Prerequisites:

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

None Prerequisites: 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

**OST 164** Office Editing

0

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 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 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 244** Med. Document Production

> 2 2

Prerequisites: OST 134 Corequisites: None

This course provides production-level skill development in processing medical documents. Emphasis is placed on producing mallable 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.

Prerequisites:

OST 247 **Procedure Coding** 

2 2 3 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 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. Class/Lab/Credit or Class/Lab/Exp./Credit

Upon completion, students should be able to sit for various medical coding certification exams.

OST 250 Long-Term Care Coding

2 3

MED 121 or OST 141 Prerequisites:

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

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

OST 164 and either OST 134 or Prerequisites:

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

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

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

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 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 albe 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* 

Class/Lab/Credit or Class/Lab/Exp./Credit to satisfy the Comprehensive Articulation Agreement premajor and/or elective course requirement.

1

### PED 139 Bowling-Beginning

0 2 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 premajor and/or elective course requirement.

## PED 152 Swimming-Beginning

) 2

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, 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 Class/Lab/Credit or Class/Lab/Exp./Credit

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.
- 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.
- 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.
- 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

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 lighting. 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

PHO 110 Prerequisites: 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 4 3

Prerequisites: None Corequisites: None

This course introduces 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### **PHO 140** Digital Photo Imaging I

2 4 4

PHO 110 Prerequisites: 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

PHO 110 Prerequisites: 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

4

PHO 110 Prerequisites: 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

PHO 110

Prerequisites: 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 None

Prerequisite: Corequisites: None Class/Lab/Credit or Class/Lab/Exp./Credit

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

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

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.

#### Portraiture PHO 226 3 3 4 PHO 115 Prerequisites:

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 PHO 115 Prerequisites: 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

# PHY 251 General Physics I

3 3 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

None

2 0 Prerequisites None

Corequisites

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 sociall behavioral sciences.

### POL 130 State & Local Government

3 0
Prerequisites: None
Corequisites: None

This course includes state and local political institutions and practices in the context of American federClass/Lab/Credit or Class/Lab/Exp./Credit

alism. 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

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 None

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 sociallbehavioral sciences. (\*VLC)

## PSY 239 Psychology of Personality

3 0 3 PSY 150

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 PSY 150

Prerequisites: PSY 15 Corequisites: None

3

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

Child Development I **PSY 244** 

3 0 3

core requirement in social/behavioral sciences. (\*VLC)

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

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 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 RED 080 or ENG 085 Prerequisites:

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

RED 080 or ENG 085 Prerequisites:

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

6

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** 

6 4

AHR 111 or ELC 111 Prerequisites:

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

AHR 111 or ELC 111 Prerequisites:

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

World Religions **REL 110** 3

0 None Prerequisites: Corequisites:

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.

None

Class/Lab/Credit or Class/Lab/Exp./Credit

**REL 211** Intro to Old Testament

3 0 3

Prerequisites: 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

None

Prerequisites: 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 Testament 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

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 None

Prerequisites: 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: 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

3

#### **SOC 210** Introduction to Sociology

3

0 Prerequisites: None None Corequisites:

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

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**

0

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

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

0

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.

#### Spanish Lab 1 SPA 181

None

Prerequisites: Corequisites:

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

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### 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 SPA 211

Prerequisites: 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

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

Take SPA 281 Prerequisites:

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

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

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 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 rec-

Class/Lab/Credit or Class/Lab/Exp./Credit

ommended 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 2 2 1

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
- 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

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,

Class/Lab/Credit or Class/Lab/Exp./Credit

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

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

Internet/Web Fundamentals WEB 110

2 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

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

3

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.

3

#### **WEB 120** Intro Internet Multimedia

2 2 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 3 3 Prerequisites: None None

Corequisites:

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

3 Prerequisites: 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 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.

Class/Lab/Credit or Class/Lab/Exp./Credit

#### WEB 182 **PHP Programming** 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 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 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 Class/Lab/Credit or Class/Lab/Exp./Credit

completion, students should be able to design and develop database driven web applications according to industry standards.

#### WEB 285 **Emerging Web Technologies**

None

Prerequisites: 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 3 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 selfpromotional 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

### **Cutting Processes** WLD 110

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, plasmaarc, 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 wellding processes.

#### WLD 115 SMAW (Stick) Plate 2 9

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
- 5.Demonstrate safe and proper GMAW equipment setup, operation, and shut-down practices in accordance to manufacturer's recommendations.

#### GTAW (TIG) Plate WLD 131

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.

Class/Lab/Credit or Class/Lab/Exp./Credit

- •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

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

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

WLD 115, WLD 121, and WLD 131 Prerequisites:

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

10 1

Prerequisite: None Corequisites: None

Class/Lab/Credit or Class/Lab/Exp./Credit

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 workrelated competencies.

#### WBL 112 Work-Based Learning I

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 workrelated competencies.

#### WBL 113 Work-Based Learning I

0 30 2

None Prerequisite: 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 workrelated competencies.

#### WBL 114 Work-Based Learning I

0 40 4

None Prerequisite: 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 workrelated competencies.

#### WBL 121 Work-Based Learning II

0 10 1

None Prerequisite:

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 Class/Lab/Credit or Class/Lab/Exp./Credit 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.

## 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

Class/Lab/Credit or Class/Lab/Exp/Credit 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.

## 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.

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