

# Academic Catalog

2021 | 2022



MIDLANDS  
TECHNICAL COLLEGE

# Academic Catalog

2021 | 2022



**MIDLANDS**  
TECHNICAL COLLEGE

## Mailing Address

### **Midlands Technical College**

PO Box 2408 | Columbia, SC 29202

## Street Addresses and Phone Numbers

### **Airport Campus** | 803.738.8324

1260 Lexington Drive  
West Columbia, SC 29170

### **Beltline Campus** | 803.738.8324

316 S. Beltline Boulevard  
Columbia, SC 29205

### **Harbison Campus** | 803.738.8324

7300 College Street  
Irmo, SC 29063

### **Fort Jackson Center** | 803.782.3213

Army Continuing Education Center  
Imboden Street  
Fort Jackson, SC 29207

### **Batesburg-Leesville Campus** |

803.604.1601  
423 College Street  
Batesburg-Leesville, SC 29070

### **Fairfield Campus** | 803.815.6650

1674 Highway 321 North Business  
Winnsboro, SC 29180

### **Northeast Campus** | 803.738.8324

151 Powell Road  
Columbia, SC 29203

## General Information

For general information, you may write, fax, email, or call: Midlands Technical College, Student and Campus Information Services, PO Box 2408, Columbia, SC 29202; Call 803.738.8324; Fax 803.738.7784; or Email [askmtc@midlandstech.edu](mailto:askmtc@midlandstech.edu).

**Midlands Technical College Website:** [MIDLANDSTECH.EDU](http://MIDLANDSTECH.EDU)

## Statement of Nondiscrimination

Midlands Technical College does not discriminate in admissions, educational programs or employment on the basis of race, sex, sexual orientation, national origin, ethnic group, color, age, religion, disability, genetic information, gender, gender identity, military service, pregnancy, childbirth, or related medical conditions including but not limited to lactation, or any other category protected by applicable law. In compliance with all federal and state laws, including Section 35.107 of the Department of Justice regulations, the Age Discrimination Act of 1967, Title VI and Title VII of the Civil Rights Act of 1964 and Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1992 as well as the ADA Amendments of 2008 (ADAA), the South Carolina Pregnancy Accommodations Act of 2018 and the Genetic Information Nondiscrimination Act of 2008 (GINA), Midlands Technical College offers access and equal opportunity in its admissions policies, academic programs and services, and employment of disabled individuals in that no otherwise qualified person will be denied these provisions on the basis of a disability. Midlands Technical College also prohibits retaliation against any person for bringing a complaint of discrimination or for participating in an investigation of a complaint of discrimination. Student inquiries or complaints should be directed to Ms. Debbie M. Walker in her position as Chief Compliance Officer/Title IX Coordinator. She can be reached at Midlands Technical College, P.O. Box 2408, Columbia SC 29202, by telephone at 803.822.3261, or email at [walkerd@midlandstech.edu](mailto:walkerd@midlandstech.edu). Faculty and staff inquiries or complaints should be directed to Nicole B. Edwards, Assistant

Director of Human Resource Management /Equal Employment Opportunity (EEO) Officer, at 803.822.3050 or edwardsn@midlandstech.edu.

### **Policy and Procedural Exceptions**

Exceptions to the policies and requirements in this catalog are rarely granted. Students are cautioned that the policies and procedures of Midlands Technical College clearly identify personnel who have authority to make exceptions to policy. Students seeking any deviation from requirements in this catalog should be certain they have received appropriate approval.

### **Academic Limitations**

To ensure the highest quality education, Midlands Technical College sets certain limitations on its academic procedures. Please read the section below for current limitations.

#### **> *Placement Test Scores***

A student's scores on appropriate tests for placement in courses will be acceptable for three years from the date the test is taken.

#### **> *Transfer Course Work Applied Toward Graduation***

Applicability and time limitations on transfer course work will be determined by the appropriate program's department chair or designee.

#### **> *Grade Changes***

Normally, a student's grade in a course may not be changed later than one term following the award of the grade. The grade may be changed only by the course instructor or the department chair. Exceptions to these policies may be made only by the appropriate vice president.

#### **> *Catalog Rights***

Students admitted to the college are granted the right to complete programs as stated in the college's *Academic Catalog* at the time of initial matriculation to the program. As long as the student is eligible to re-enroll, the student maintains these catalog rights. The college reserves the right to change courses as long as the total number of credits required for completion of the program is not increased. A student who must reapply for admission comes into the college under the catalog in effect at the time of readmission.

#### **> *Course Cancellation***

Courses without adequate enrollment are subject to cancellation.

#### **> *Photographing Employees, Students, and Related Activities***

Midlands Technical College often photographs its students, faculty, and staff for college publications and public relations. Anyone who doesn't want his or her photograph used for these purposes should file a written request with the MTC Marketing Communications Office at [marketing@midlandstech.edu](mailto:marketing@midlandstech.edu).

### **Catalog Changes**

MTC reserves the right to change, without notice, any statement in this catalog, including, but not limited to, statements concerning tuition, fees, charges, academic regulations and requirements, course cancellations, class size, instructors, curricula, calendars, credits, or any other college activity or program. Changes will become effective whenever the appropriate MTC authorities so determine. See MTC's website for current information.

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# President's Message



Welcome to Midlands Technical College!

Whether you are training for in-demand careers in two years or less, preparing for advanced degrees, or anything in between, you can get anywhere from here! No matter what success looks like – preparing you is at the heart of everything we do.

At MTC, we have small classes and knowledgeable, credentialed, and experienced faculty. We also have the tools and expertise to help you find the career that's right for your success.

Midlands Technical College has more than 150 academic and training programs presented through eight Schools of Study:

- > School of Advanced Manufacturing and Skilled Trades
- > School of Business
- > School of Education and Public Service
- > School of English and Humanities
- > School of Health Care
- > School of Interdisciplinary Studies
- > School of Science, Information Technology, Engineering, and Math (STEM)
- > School of Social and Behavioral Sciences

If you aren't sure what School of Study or program is right for you, MTC's advisors, faculty, and staff are ready to help you find what fits your needs.

As a graduate of Midlands Technical College and now as its President, I am proud to lead my alma mater. Our graduates are nurses, doctors, technicians, welders, business owners, lawyers, and leaders from all walks of life. I'm happy that you chose to benefit from our targeted educational programs, dedicated faculty and staff, and personalized services.

Again, we welcome you to Midlands Technical College. You really can get anywhere from here!

Sincerely,

A handwritten signature in black ink that reads "Ronald L. Rhames". The signature is written in a cursive, slightly slanted style.

Ronald L. Rhames, '78  
President  
Midlands Technical College

## **COLLEGE ACCREDITATION**

Midlands Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees, diplomas and certificates. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404.679.4500 for questions about the accreditation of Midlands Technical College.

## **PROGRAM APPROVAL AND ACCREDITATIONS**

Specific programs are accredited and/or approved by the:

- > Accreditation Council for Business Schools and Programs (ACBSP)
- > Accreditation Commission for Education in Nursing (ACEN)
- > American Bar Association (ABA) Standing Committee on Paralegals
- > American Society of Health-System Pharmacists (ASHP)
- > Accreditation Council for Pharmacy Education (ACPE)
- > Commission on Dental Accreditation (CODA) of the American Dental Association – Dental Assisting Program and Dental Hygiene Program
- > Commission on Accreditation in Physical Therapy Education (CAPTE)
- > Commission on Accreditation for Respiratory Care (CoARC)
- > Commission on Accreditation of Allied Health Education Programs (CAAHEP)
  - Accreditation Review Committee on Education in Surgical Technology and Surgical Assisting (ARC/STSA)
  - Medical Assisting Education Review Board (MAERB)
- > Council for Standards in Human Service Education (CSHSE)
- > Engineering Technology Accreditation Commission of ABET
- > Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT)
- > Joint Review Committee on Education in Radiologic Technology (JRCERT)
- > National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
- > National Automotive Technicians Education Foundation (NATEF)
- > National Institute for Metalworking Skills (NIMS)
- > National Association for the Education of Young Children (NAEYC)
- > South Carolina Board of Nursing (SCBN)
- > South Carolina Department of Health and Human Services (SCDHHS)
  - Nursing Assistant Program

## **SOUTH CAROLINA TECHNICAL COLLEGE SYSTEM**

In addition to these accrediting bodies, Midlands Technical College is part of a system of technical colleges operated under the auspices of the State Board for Technical and Comprehensive Education. The State Board establishes policies that apply to the entire state system and approves all of the college's associate degree, diploma and certificate programs. All associate degree programs are reviewed and approved by the South Carolina Commission on Higher Education.

# 2021-2022 College Calendar

(Note: The college calendar is subject to change)

## FALL SEMESTER, 2021

Fall Late Registration.....	August 18
Fall, Fall I, & FJ I Classes Begin.....	August 23
Weekend Classes Begin.....	August 27
Labor Day Holiday College Closed.....	September 6
10 Week Classes Begin.....	September 20
Fall I, & FJ I Classes End.....	October 8
Student Holidays.....	October 11, 12
Fall I, & FJ I Exams.....	October 13, 14
Fall II, & FJ II Classes Begin.....	October 18
Student Holidays.....	November 24-26
Thanksgiving Holidays College Closed.....	November 25-26
10 Week Classes End.....	December 4
Weekend Classes End.....	December 5
Fall, Fall II & FJ II Classes End.....	December 6
Fall, 10 Week, Fall II & FJ II Exams.....	December 8, 9, 13, 14
Weekend Classes Exams.....	December 10, 11
Holidays College Closed.....	December 20, 2021 - January 3, 2022

## WINTERMESTER, 2021

Online Late Registration.....	December
Wintermester Classes Begin.....	December 17
Wintermester Classes End.....	January 5
Wintermester Exams.....	January 5

## SPRING SEMESTER, 2022

Spring Late Registration.....	January 6
Spring, Spring I, & FJ I Classes Begin.....	January 10
Weekend Classes Begin.....	January 14
Dr. Martin Luther King, Jr. Holiday College Closed.....	January 17
10 Week Classes Begin.....	February 8
Spring I, & FJ I Classes End.....	February 25
Spring I, & FJ I Exams.....	February 28 - March 1
Spring II, & FJ II Classes Begin.....	March 3
Student Holidays.....	March 7-11
Weekend Classes End.....	April 23
Spring & 10 Week Classes End.....	April 25
Spring II & FJ II Classes End.....	April 26
Spring, 10 Week, Spring II & FJ II Exams.....	April 27, 28, May 2, 3
Weekend Classes Exams.....	April 29, 30
Graduation.....	May 4

**MAYMESTER, 2022**

Maymester Classes Begin .....	May 6
Maymester Classes End.....	May 31
Maymester Exams .....	June 1

**SUMMER SEMESTER, 2022**

Summer Late Registration .....	May 11
Summer, Summer I & FJ Classes Begin .....	May 16
Weekend Summer Classes Begin.....	May 20
7 Week Classes Begin.....	June 13
Summer I Classes End.....	June 17
Summer I Exams .....	June 20, 21
Summer II Classes Begin .....	June 23
FJ Classes End.....	June 30
Independence Day Holiday College Closed.....	July 4
FJ Exams.....	July 5, 6
Weekend Classes End.....	July 23
Summer Classes End.....	July 25
Summer II Classes End.....	July 28
Summer 7 Week Classes End .....	July 29
Weekend Classes Exams.....	July 29, 30
Summer, 7 Week, & Summer II Exams.....	August 1, 2, 3, 4

## MTC MISSION STATEMENT

Midlands Technical College is a comprehensive, multi-campus, two-year public college serving the primary region of Richland, Lexington and Fairfield counties of South Carolina. College programs and services provide accessible, affordable, quality education that prepares a diverse student population to succeed in the job market, to transfer to senior colleges and universities, and to achieve their professional and personal goals. The college equitably provides higher education opportunities, strengthens businesses and enhances the economic and social vitality of the community.

## MTC VISION STATEMENT

Midlands Technical College, as a premier higher education partner, creates innovative learning environments, promotes individual and business success, drives economic vitality, and enhances quality of life.

## MTC STATEMENT OF ROLE AND SCOPE

The college implements its mission through a clearly defined set of programs, services and partnerships that include:

**College-Level Credit Programs.** The college serves approximately 17,000 credit students annually through courses leading to associate degrees, diplomas and/or certificates in Arts and Sciences, Business, Engineering Technology, Health Sciences, Industrial Technology, Information Systems Technology, Nursing and Public Service.

**Corporate and Continuing Education Programs.** The college provides professional and career training and development through open enrollment and customized courses with approximately 25,000 enrollments annually. The college serves individuals, businesses and the community. The college also offers self-supporting, noncredit activities for personal enrichment.

**Student Development Programs and Services.** The college offers programs and services to current and prospective students and alumni to increase their success and enhance their potential for personal, educational and professional growth. The college increases student access to higher education and careers through recruitment, developmental education, financial services, counseling and career services, and evaluation and support services.

**College Administrative Support Services.** The college, through an array of comprehensive administrative services, ensures an effective and fiscally sustainable institution.

**Economic Development Programs.** MTC proactively promotes business growth and regional prosperity. The college enhances the economic vitality and quality of life of the region by providing a sustainable workforce and opportunities for community engagement.

**Business Collaboration and Partnerships.** MTC initiates and expands business relationships through advisory board participation and business outreach activities. Business Solutions works with potential and existing business customers to identify needs and provide specific education and training for their potential and current employees.

## STATEMENT OF VALUES

Midlands Technical College contributes to the community by helping individuals reach their full potential through affirmation of the following values:

**Commitment to Students** - Belief in providing a learner-centered environment offering quality instruction, resources and services and presenting challenging opportunities for the continued growth and development of its students. The college assists students in clarifying their lifelong goals, navigating career pathways, fostering entrepreneurship, developing interpersonal skills and maximizing their potential.

**Commitment to Excellence in Education** - Belief in offering the highest quality academic programs and support services through a variety of delivery methods that reflect the relevant education required for future success. The college builds a community of learners and prepares students for the work environment or further education.

**Commitment to Quality Service** - Belief in providing professional, respectful, responsive, flexible, approachable and courteous quality service to all constituents.

**Commitment to Integrity** - Belief in ethical behavior by all members of the college community. The college fosters and promotes integrity, honesty, fairness and mutual respect among faculty, staff, students and all others associated with the college.

**Commitment to Economic Vitality and Quality of Life** - Belief in preparing students for successful careers by providing a seamless curriculum bridging secondary education, higher education and lifelong learning. The college serves as a resource for community engagement and partners with business, education and government to enhance the growth and prosperity of the region.

**Commitment to Access and Diversity** - Belief in providing access to programs and services to students who comprise the cultural, economic and demographic diversity of the community.

**Commitment to Faculty and Staff** - Belief in the importance of attracting and retaining an excellent and diverse faculty and staff who collectively create a positive learning environment. The college provides professional development opportunities and demonstrates its commitment to the college community by providing resources to carry out the mission of the college.

**Commitment to a Quality Campus Environment** - Belief in the importance of creating an inviting and secure environment for the college community. The college values clear communications, open exchange of ideas, involvement in decision-making, and respect for all individuals.

**Commitment to the Management and Diversification of Resources** - Belief in the effective use of college resources to provide quality education and services for the students and community and in being accountable to constituents. The college seeks to diversify its financial support through the pursuit of new and innovative resources.

**Commitment to Innovation and Renewal** - Belief in the spirit of creativity and discovery in all college endeavors. The college is open to innovation, adaptation and positive change for the benefit of all its constituencies.

## **MIDLANDS TECHNICAL COLLEGE COMMISSION**

The governing board of Midlands Technical College is the Midlands Technical College Commission. These leading citizens are appointed by the governor, upon the recommendation of their respective legislative delegations, to serve as trustees for the college.

Members of the commission include: L. Todd Sease, Chair; Sandra J. Jackson, Vice Chair; George P. Powers, Treasurer; Paula A. Hite, Secretary; Katie M. Bolden; Ronald H. Burkett; Michael S. Farrell; Pamela S. Harrison; Margaret U. Holmes; Randall Jackson; John M. Knotts, Jr.; Robert C. Lentz; and Diane E. Sumpter.



L. Todd Sease  
Chair



Sandra J. Jackson  
Vice Chair



George P. Powers  
Treasurer



Paula A. Hite  
Secretary



Katie M. Bolden



Ronald H. Burkett



Michael S. Farrell



Pamela S. Harrison



Margaret U. Holmes



Randall Jackson



John M. Knotts, Jr.



Robert C. Lentz



Diane E. Sumpter



Ronald L. Rhames  
Ex-Officio Member  
President  
Midlands Technical College

## **MIDLANDS TECHNICAL COLLEGE FOUNDATION**

The Midlands Technical College Foundation provides a structure for individuals, corporations and other private sector interests to demonstrate support for the programs and services offered by Midlands Technical College.

The MTC Foundation is an active partner in advancing the college's community development mission and seeks financial and other support for the college. In carrying out this role, the Foundation's Board of Trustees ensures that excellence is achieved and maintained as private sector resources are a critical complement to limited public funding.

The Board of Trustees for the Foundation is composed of individuals who are leaders in the community's business and civic affairs.

### **Midlands Technical College Foundation Board**

**James L. Braun, Chair**

**Christian Stormer, Treasurer**

**Carolyn Ewing-Turner, Secretary**

David Dubberly

Tomothy C. Edmond

Kristi Eidson

Eddie Goff

Solomon Jackson, Jr.

Walter J. Johnson

Willis Langley, III

Lasenta Lewis-Ellis

Vaughn K. Reynolds

#### **Trustees Emeriti:**

James D. Reynolds

Thomas E. Persons, Sr.

#### **Ex-Officio:**

L. Todd Sease, Commission Chair

Nancy McKinney, AVP Office of Philanthropy

Ronald L. Rhames, MTC President

Debbie M. Walker, VP for Business Affairs

**MIDLANDS TECHNICAL COLLEGE PRESIDENTS EMERITI**

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**Dr. James L. Hudgins**  
1986-1999  
President Emeritus



**Dr. Barry W. Russell**  
1999-2005  
President Emeritus



**Dr. Marshall (Sonny) White, Jr.**  
2006-2015  
President Emeritus

# Academic Policies and Requirements



## Admission to the College

### Admission Policy

All applicants must possess a high school diploma or its equivalent or must be at least 18-years-old to be considered for admission into curriculum programs and courses offered by the college. Graduates of South Carolina high schools who have received a “certificate,” not a diploma, are strongly urged to return to their high school district to complete the diploma or GED. Certificate recipients who meet minimum scores on the college’s placement exam will be admitted to the college. Eligible high school students who desire to enroll in one or more college courses concurrently with their high school classes may do so with the written authorization of their parent(s) and high school principal.

All applicants are required to participate in placement testing (assessment) prior to being accepted by the college unless exempted by criteria stated in college procedures on assessment, admission and placement. Specific requirements have been established for individual program entrance. For applicants who require additional preparation for college-level work, the college offers courses to develop strong basic skills in the areas of English, mathematics, and reading.

### Admission Procedures

The first step for persons seeking enrollment in curriculum courses is to submit an application for admission, including a \$35 non-refundable application fee. The preferred method to apply is electronically at [MIDLANDSTECH.EDU](http://MIDLANDSTECH.EDU) or at one our convenient Admissions Offices at either the Airport or Beltline campus. Paper applications

are available by request. Please contact the Admissions Office at 803.822.6714 or by emailing [admissions@midlandstech.edu](mailto:admissions@midlandstech.edu).

The next step is to verify legal presence in the United States. Midlands Technical College is in full compliance with the SC Illegal Immigration Reform Act (section 59-101-430 of the South Carolina Code of Laws, As Amended).

It is the policy of MTC to review the lawful United States presence of each person currently enrolled or seeking admissions.

Students who are eligible and who complete the Free Application for Federal Student Aid (FAFSA) have their legal presence checked by the U.S. government.

Students who cannot complete the FAFSA, are ineligible for federal financial aid because of immigration status or have not had the FAFSA sent to MTC, should complete the MTC Verification of Lawful Presence form, using the instructions located on the form.

Citizens of the United States will only need to be verified once during their enrollment at MTC. Non-U.S. citizens will be verified each year, or when their United States Citizenship and Immigration Services documents expire, whichever comes first.

### **Transcript Requirements:**

All applicants are asked to submit an official copy of their high school transcripts. These transcripts are used for financial aid, scholarships, academic advisement and other purposes. The transcript is required for admission purposes only if the applicant:

- a. Is less than 18-years-old.
- b. Is applying for a Health Sciences program.
- c. Wants to be considered for a LIFE Scholarship or other types of financial programs that may require it.
- d. Has been specifically requested to submit it to the Admissions Office.
- e. Is an international student requesting an I-20.

Transcripts should be sent to the address below or via email to [admissions@midlandstech.edu](mailto:admissions@midlandstech.edu)

Midlands Technical College  
Admissions Office  
Post Office Box 2408  
Columbia, SC 29202

Applicants possessing a high school equivalency certificate (GED) or a diploma from an adult basic education program must provide the Admissions Office with documentation of successful GED completion.

Transfer students — applicants who have attended a regionally accredited college or university — must request that all colleges previously attended send official transcripts directly to the Midlands Technical College Admissions Office. These transcripts will be reviewed to determine if the placement testing requirement will be waived. These transcripts are also used to determine whether transfer students are eligible for LIFE Scholarships. Applicants requesting transfer credit consideration of post-secondary course(s) from foreign institutions must obtain, at the applicant's expense, a course-by-course evaluation of the foreign course work from a current National Association of Credential Evaluation Services (NACES) member evaluation service.

American Council on Education (ACE) guidelines may also be used to evaluate prior course work. Applicability and time limitations on transfer course work will be determined by the appropriate program's department chair or designee. Credit will be granted only once for a given course. The following criteria are used to determine acceptability of prior college coursework for advanced standing:

1. final grade for the course(s) must be a "C" or better;
2. course(s) must have been taken at a regionally accredited institution; if from a non-regionally accredited foreign post-secondary institution, the courses must have been recommended by a NACES-member external evaluation service;
3. course(s) must be applicable to the program in which the student plans to enroll in order for the course to be considered for graduation;
4. course(s) must be college-level; no course which is remedial/developmental in nature will be accepted.

To ensure the admission application will be processed in time for registration, applications, transcripts and placement test scores must be received in the Admissions Office at least three weeks prior to the published application deadline for the term in which the student plans to enroll. Advanced standing cannot be awarded until official transcripts are received and evaluated.

## **Admission Testing**

Applicants are admitted to Midlands Technical College based on successful previous college coursework, SAT scores, ACT scores, Multiple Measures Exemption Criteria, including high school GPA, or Midlands Technical College Placement Test reading score. Other admission tests and criteria may be required for admission to specific academic programs. These special requirements are outlined in the Academic Program section of the catalog.

## **Placement Testing**

Applicants for curriculum programs must be tested for course placement unless exempted. Exemptions are granted if one of the following criteria is met:

1. the applicant has earned a grade of "C" or better in appropriate college-level English and mathematics courses taken at a regionally accredited college or university;
2. the applicant has earned advanced placement credit for English and mathematics on CLEP and/or AP exams that are recognized by the college;
3. the applicant has met one of Midlands Technical College's Multiple Measures placement exemption criteria. A complete list of exemption criteria may be found on the Admissions website.
4. the applicant has taken the Midlands Technical College Placement Test within the previous three years;
5. the applicant plans to enter certain certificate programs that do not require placement testing;

6. the applicant has earned a two-year degree or higher from a regionally accredited college or university (this exemption may not apply to some academic programs); or
7. the applicant is not pursuing an academic award and desires to be admitted to take a specific course(s) under the Career Development status. The applicant must have met course prerequisites. English and mathematics courses, or courses with English and mathematics prerequisites, require demonstrated proficiency in English and mathematics skills and may require testing if acceptable prerequisite courses have not been completed. Students not pursuing degrees, diplomas or certificates are limited to 18 semester hours in Career Development status, unless this limit is waived by the academic department chair.

Students with documented disabilities may request special placement testing accommodations to ensure optimum performance on assessment. To arrange special placement testing, students should contact Counseling and Career Services.

The Midlands Technical College Placement Test consists of questions that address the applicant's career goals and commitment to program choice. The main emphasis of the placement test, however, focuses on helping students make sound educational decisions. Unless exempted, applicants are required to take a reading comprehension test and a basic mathematics and algebra skills test. Depending on the applicant's ability level as indicated by placement test scores, the applicant will be:

1. placed in entry-level courses in the chosen program of study;
2. placed in developmental courses;
3. placed concurrently in developmental courses and a program of study; or
4. referred to an outside agency for assistance.

Reading scores will determine whether applicants will be admitted into the college and into which courses they will be placed. The reading scores will determine placement into levels of English as well as eligibility for some other courses. Mathematics scores determine placement into sequential levels of developmental and curriculum mathematics courses. Applicants who do not meet minimum program entrance criteria in one or more of the basic skill areas will be required to satisfactorily complete the respective developmental course(s) before taking related courses in their chosen program.

### **Placement Testing for Foreign Languages**

Students planning to enroll in foreign language courses should be asked specific questions by their advisor to determine if they must take a placement exam for the appropriate course level of enrollment. If the advisor determines that the student must take the placement exam, the student should then contact the Testing Office to schedule a foreign language placement exam. The student must enroll in the level determined by the placement exam.

### **Placement Testing for Financial Aid Eligibility**

New students who do not have a high school diploma, or an equivalent such as a GED, and who did not complete secondary school in a homeschool setting are not eligible for Title IV funds. Such students can no longer become eligible by passing an approved "ability to benefit" test or by satisfactorily completing at least six credit hours or 225 clock hours of college work that is applicable to a degree or certificate offered by the student's postsecondary institution.

However, students who were enrolled in an eligible educational program of study prior to July 1, 2012 may continue to be eligible for Title IV assistance under either the Ability to Benefit Test or credit hour standards. Students meeting these criteria should contact the Office of Student Financial Services.

## **Special Admission Procedures**

### **Readmission**

Students who have previously attended Midlands Technical College and have not been enrolled for three consecutive terms, including summer, are considered readmit students. Readmitting students must apply for readmission to the college by submitting an admission application and meeting current criteria for admission to the curriculum program desired, including testing and course placement requirements.

The college reserves the right to refuse readmission to any applicant who has an unacceptable academic or conduct record. Individuals with financial obligations to the college must resolve these obligations before they will be allowed to register for classes.

### **Readmission for Students on Academic Suspension**

Students suspended for academic reasons must reapply for admission and complete a Petition for Readmission Following Suspension form with a counselor in Counseling and Career Services. Students must meet with a counselor in Counseling and Career Services to complete paperwork for readmission by the following deadlines: July 1 for Fall Semester, November 1 for Spring Semester, and April 1 for Summer Semester. Additional testing may be required. More specific information concerning readmission of suspended students is available from Counseling and Career Services offices on the Airport and Beltline Campuses. Suspended students may not re-enroll until the suspension term is completed.

### **Health Care Programs**

The Health Care programs have specific requirements that applicants must meet to be admitted to individual majors. Special admission requirements are outlined in the School of Health Care section of this catalog and also on the college website at <https://www.midlandstech.edu/learn/academic-programs/Healthcare>.

### **International Students**

In addition to meeting the regular college and program admission requirements, international applicants must also meet the following requirements if an Immigration and Naturalization form I-20 from the United States Citizenship and Immigration Services is required:

1. Be 18-years-old or present evidence of successful completion of a secondary level program. This evidence must be in the form of a transcript or other traditional document from the institution. The document(s) must be accompanied by a certified English translation, if not in English.
2. Score a minimum of 61 on the Internet version of the Test of English as a Foreign Language (TOEFL) or the equivalent, set by the MTC Office of Admissions. The TOEFL requirement may be waived if the student has satisfied requirements specified in an official agreement between Midlands Technical College and an approved English language program

3. Provide evidence of financial support.
4. Deposit two semesters' advance tuition in an escrow account.
5. Complete Placement Testing unless appropriate exemption criteria are met. See the "Placement Testing" section.

Additional information about international admissions can be obtained from the college's Admissions Office.

### **Physical Examination**

A statement of good physical health is required for some programs. If a physical examination is required, the applicant will be notified.

## **Academic Fresh Start**

Students who withdraw or are suspended from Midlands Technical College frequently return to school at a later date to resume their education. Unfortunately, poor academic performance during their first period of enrollment often presents a major obstacle to returning students' overall success.

Individuals in this category who want an opportunity for a fresh undergraduate start at Midlands Technical College, without the penalty of their prior academic record, may apply for admission under Academic Fresh Start, subject to strict conditions set forth by the college. For information about this process, contact the Counseling and Career Services Office at 822-3505 (Airport Campus) or 738-7636 (Beltline Campus).

## **Advanced Standing**

Midlands Technical College has established policies and procedures that may allow students to enter certain curriculum programs with advanced standing. In many cases, credit may be awarded through transfer of credit from other post-secondary institutions, AP exams, challenge examinations, the College Level Examination Program (CLEP), military experience or prior experiential learning. New students applying for advanced standing should submit documentation to the Admissions Office by the application deadline. Applicability and time limitations on transfer course work will be determined by the appropriate program's department chair or designee.

## **Orientation**

Orientation is required of all new and readmitted students at Midlands Technical College. F-1 visa students have a separate **mandatory** orientation to review and understand immigration and college policies that may impact their visa status. Orientation helps students answer the following five questions:

- > Am I in the right MTC program for me and my career plans?
- > How will I cover the cost of college, especially if I need financial aid?
- > What does MTC expect from me?
- > When do I need to make important decisions?
- > When can I meet with an advisor and register for my courses?

This requirement also prepares students for their first academic advisement session. New first-time freshmen, new first-time transfers, and readmitted college students

have a registration hold until the student has completed orientation and advisement with Academic and Career Advising. Several academic programs have additional **mandatory** orientation and advisement before the enrollment process can be completed. For more information, call Academic and Career Advising at 822-6755.

## Academic Advising

Academic and Career Advisors assist students with their academic plans and provide information on college resources. Students are advised for courses appropriate to their program of study as determined by placement test results. New students with previous coursework from another college are expected to bring a copy of their college transcript(s) to the advisement appointment in addition to submitting official transcripts and score reports to MTC Admissions. Students may view individualized academic program information by logging into their MyMTC account.

New and current students should schedule an advising appointment through their MyMTC account (Advisement Appointment Scheduling). Academic and Career Advisors assist students in developing their academic plan, evaluating their academic progress and connecting with appropriate campus resources and services. This guidance will prepare students to assume primary responsibility for their own educational planning including course selection and registration.

Student responsibilities include, but are not limited to:

1. Using the college's online services and required MyMTC Email account.
2. Checking the student MyMTC Email account frequently for important updates.
3. Enrolling only in courses for which prerequisites have been met.
4. Planning ahead for multiple semesters – some courses are not offered every semester.
5. Knowing and completing all coursework and program requirements needed for graduation approval.
6. Knowing and complying with all applicable financial aid and/or scholarship requirements.
7. Remaining informed and up-to-date on the admission and program requirements of their desired transfer institution.

## Registration for Classes

After acceptance to the college, new and readmitting students are notified by the Admissions Office to meet with an Academic and Career Advisor to discuss academic progress and select courses. Current students should schedule an advising appointment through their MyMTC accounts.

Once a student meets with their Academic and Career Advisor, they develop and receive a registration plan which outlines their program of study. The student is then "web enabled" (given permission to register themselves online for classes on their plan).

Typically, the student is web enabled through a designated period of time. Once this time elapses, the student must see their Academic and Career Advisor once more for registration permission.

Other students, especially students who are continuing at the college and meet certain requirements, are web enabled and do not have to see an advisor to receive permission to register. Students, however, must be certain to enroll in courses that meet requirements for their program of study as planned with their advisor.

All students must complete the Program Eligibility Requirement Agreement found on MyMTC before they can register online. Web enabled students still have the option to meet with an Academic and Career Advisor if they wish.

At times, students may be connected with the Records Office in order for a staff member to enroll them in courses.

To secure seats in selected classes, students must pay tuition and fees by the payment deadline stated in the college calendar. Students enrolling in Midlands Technical College for the first time must pay a one-time enrollment fee of \$50. Students who have not paid tuition and fees or have not had their financial aid processed by the published deadline dates may have their schedules deleted and must reschedule courses during the Online/On-campus Late Registration period.

Online/On-Campus Late Registration is held before the beginning of each semester, before classes begin. Students are assessed a late fee and course availability is limited. This registration period is for extenuating circumstances only, so students should make every effort to be advised, to register, and to pay tuition and fees before the end of the regular registration period. Students must satisfy all financial obligations to the college in order to register for future semesters and to receive college transcripts.

Enrolled students may change their class schedules during the published schedule change dates. Students are responsible for work covered from the first day of class.

## **Registration for College Employees and Senior Citizens**

Full-time college employees in permanent positions and senior citizens ages 60 or above may take course(s) on a space-available basis and receive a waiver of tuition for all or a portion of their tuition provided academic eligibility and lawful presence requirements are met. Midlands Technical College is in full compliance with the SC Illegal Immigration Reform Act (section 59-101-430 of the South Carolina Code of Laws, As Amended).

Admission, placement testing and other college requirements apply. First-time enrollment and student fees also apply to senior citizens. First-time enrollment fees are required for college employees. Course dates and times are published on the college's website. Information on registration processes may be obtained from the Student Information Center at (803) 738-8324.

## **Registration for Course Audits**

Students wanting to audit a course may do so on a space available basis two days after late registration. Course tuition and applicable fees apply. Students do not receive grades for audited classes, nor can an audited class be transitioned into a for-credit class.

## **Standards for Academic Progress**

(Standards of progress for financial aid are posted online and under the section on Student Financial Services.)

To remain in good standing, students pursuing a degree, diploma or certificate who are enrolled in regular curriculum classes must maintain a cumulative grade point average (GPA) of at least 2.0.

Students who fail to earn a cumulative GPA of at least 2.0 will be placed on probation during the next term in which they enroll in the college. (Some programs require higher GPAs each term to remain in good standing.) Students on probation are advised to discuss their academic situation with their Academic and Career Advisor, seek additional supportive resources such as the Academic Success Centers and Counseling Services as needed, and take reduced course loads until performance improves. It is also recommended that the student enroll in a College Skills course unless the student has already successfully completed it.

Those who earn a cumulative GPA of at least 2.0 during that next term will be removed from probationary status.

Students on probationary status who do not earn the required GPA will be suspended from the college for the term following probation. Students on academic suspension are ineligible to enroll for college credit courses for one semester.

Students who achieve a GPA of at least 2.0 for the probationary term but whose cumulative GPA remains below 2.0 will remain on probation for one additional term. By the end of the second probationary term, students who achieve a GPA of at least 2.0 for the term but whose cumulative GPA remains below 2.0 will stay on probation for one additional term. By the end of the third probationary term, the cumulative GPA must reach at least 2.0 or the student will be suspended, unless the term GPA is 2.5 or higher.

Students on probation may not serve in college-wide elective offices or be appointed to any administrative or social committees during the probationary period.

Students enrolled in developmental or enrolled in both developmental and curriculum courses must meet standards of academic progress as defined below. Additional standards of progress are required of financial aid applicants based on the type of aid received. Please contact the Student Financial Services Office or refer to the Student Financial Aid website at MIDLANDSTECH.EDU for a copy of satisfactory academic progress standards for financial aid.

### **Developmental Courses Standards of Progress**

Students enrolled in zero-level courses only must receive grades of A, B or C in at least half of their courses to remain in good standing. Once students begin taking a 'O' level course or a 100 level course, they may not retake the placement test. Students must successfully complete the course to move to the next level and be eligible to enroll in freshman level courses. A withdrawal counts as an enrollment.

Students who do not meet this requirement will be placed on probation during the next term in which they enroll in the college.

Students enrolled in zero-level courses only who are on probation and who do not earn grades of A, B or C in at least half of their courses will be suspended from the college the term following probation. Those who do earn grades of A, B or C in at least half of their courses will be removed from probationary status.

Students taking both zero-level and curriculum courses must earn a GPA of at least 2.0 as outlined above and pass at least half of their courses.

Students who do not meet both of these requirements will be placed on probation during the next term in which they enroll in the college. All probationary guidelines as outlined in the Standards for Academic Progress will apply.

Students on probation who do not earn a GPA of at least 2.0 or who do not earn grades of A, B or C in at least half of their developmental courses will be suspended from the college during the term following probation. Those who earn a GPA of at least 2.0 and earn grades of A, B or C in at least half of their developmental courses will be removed from probationary status.

Special advisement/counseling sessions will be available to students on probation.

## **Class Attendance**

Midlands Technical College expects students to attend all scheduled instructional activities.

With the approval of the academic vice provost, individual departments may set attendance requirements that are more stringent, based on accreditation or other standards.

The specific requirements of a course will be published in course syllabi.

Students must meet all academic requirements to receive a passing grade, regardless of any exceptions made to the attendance policy.

## **Classification of Students**

*Full-Time* – A student scheduled for a minimum of 12-credit-hours or 360 clock hours.

*Part-Time* – A student scheduled for less than 12-credit-hours or less than 360 clock hours.

*Freshman* – A student who has earned up to 29.99-credit-hours.

*Sophomore* – A student who has earned 30 or more credit hours.

## **Change of Academic Major**

Students who are considering changing to a different academic major are encouraged to speak first with their Academic and Career Advisor. Depending on their standing, students may change their academic program or add another program (sometimes referred to as a “minor”) by working directly with Admissions or logging in to their MyMTC account and selecting the “Change/Add a Major” link.

### **Exceptions to the Change of Major Process**

1. International students with an F-1 status should meet with the International Student Admissions Coordinator. This advisor will check the student’s eligibility for the new major, review other pertinent information and discuss implications the requested change may have with relation to the student’s visa status. If a major change is deemed warranted, the student will be given instructions for completion. Approved requests will be changed in the college database and in the Student and Exchange Visitor Information System (SEVIS).
2. Nursing and Health Sciences students who have their final interview eligibility waived by the program director, who meet the required program admission

criteria at the level required for interview eligibility, or who have an approved Interview Results Form submitted by the Health Sciences program coordinator of the program for which they are applying, will have their Change of Major/Minor automatically completed by the Admissions Coordinator for Health Sciences or Nursing and forwarded to the Student Records office.

3. Students seeking a specialized Associate of Applied Science in General Technology (AAS.GEN or AGT) degree should complete an AGT contract with their advisor. The advisor will forward the original copy of the contract to the Registrar's office, where the students' major will be officially changed.
4. Students seeking a customized associate degree through the School of Interdisciplinary Studies (AA.AA.IDS or AS.AS.IDS) will work with an academic and career advisor to submit a curriculum proposal to the Dean of IDS. If the proposal is approved, the Dean of IDS will initiate the process to change the student's major officially.

Students should be aware that program changes may significantly affect educational and career goals, and credits earned under one major may not necessarily apply to the new major. The cumulative GPA will reflect all courses taken.

Students who are receiving benefits under a student assistance program (student financial aid, veteran's benefits or international students) should contact the appropriate office to determine how this change will affect them since these programs have specific guidelines and restrictions concerning changes of academic major.

## **Examination Policy**

Students are expected to take final examinations, which are held during a designated period at the close of fall, spring and summer terms. Faculty will administer examinations of individual courses within the published schedule. Any makeup of final examinations will be at the discretion of individual faculty.

## **Grading Policies**

Students may go online at MIDLANDSTECH.EDU to view their grades through their MyMTC account. If an official paper copy is required, students may go to the Student Records Office and make an official request. Students must present a picture I.D. to the Records Office.

If an error is suspected in the reported grades, students must notify the faculty member involved within one calendar term after the term in which the grade was issued. Failure to initiate and complete processing within the specified time will disqualify students from further consideration of a grade change.

The Midlands Technical College grading system is as follows:

- A Superior – 4 quality points
- B Above Average – 3 quality points
- C Average – 2 quality points
- D Below Average – 1 quality point
- F Failure – computed in grade point average as zero (0) quality points
- W Withdrew
- I Incomplete – must be made up within one term
- AU Audit – no credit

- E Exempted from the Course
- TR Transfer – earns credit hours, generates no grade points
- NC No Credit – for students in designated courses

Grades for zero-level courses (e.g., ENG 032) are NOT calculated into students' overall GPAs. Continuing Education grades are also not calculated into students' overall GPAs.

## Withdrawal from the College or College Courses

**Dropping Courses Through Schedule Change:** Students must officially drop their courses by the last day of the published Schedule Change period for each session in order to obtain a refund and not be held responsible for coursework. Courses dropped through Schedule Change are not recorded on the student's transcript. Payment is required if a student registers for a course and does not officially drop the course, even if the student does not attend classes.

**Withdrawing From Courses After Schedule Change:** Once the published Schedule Change period for a session has expired, students may no longer drop a course, but they can withdraw from the course. Withdrawn courses are recorded on the student's transcript. Withdrawn classes are also outside of the refund period and students are billed for the course. Students are billed for all registered classes at the point of registration and the debt will be processed through the college's collection procedures if payment is not received. Students needing to withdraw from a course or courses may complete a Drop/Add/Withdrawal form and submit it to the Student Records Office. The Drop/Add/Withdrawal form is available from the Student Records Office. The date received in the Student Records Office is the effective date for the form. **Web-enabled students dropping online during the published schedule change period do not need to complete the Drop/Add form.** After the published schedule change period, all student withdrawals must be processed through the Student Records Office. Withdrawal through the fifth day of Fall and Spring semesters and the third day for the Summer term is considered a "drop" and will not show on the official transcript. Withdrawal from the sixth day of the term for Fall or Spring or from the fourth day of a Summer term through midterm will result in a grade of "W." Students who withdraw after this day will receive a grade of "W." Faculty will not withdraw students who do not attend class. Students who stop attending class will receive the grade they have earned at the end of the semester unless they formally withdraw from the course.

Administrative withdrawal for disciplinary purposes or extenuating circumstances may be initiated by the Vice President for Student Development Services or the Vice President's designee. An Administrative Drop will be considered for students who experience debilitating medical problems, death of immediate family members or other emergency situations (with supporting documentation) which may prevent the student's successful completion of a semester.

International students in visa category F-1 must consult the international admissions coordinator before dropping any classes.

It is important that students who anticipate withdrawing from a course or courses investigate the impact of this withdrawal with the appropriate college office. Changes in course loads can affect financial aid, veteran's benefits and other enrollment-related financial situations. In addition, courses in some academic programs are sequenced and scheduled at specific times during the year. Withdrawal from these courses often lengthens the time required for students to complete an academic program of study.

Students are strongly encouraged to discuss the impact of the withdrawal on program time with their Academic and Career Advisor.

## Honors Policy

### Graduation Honors

*Associate Degree with High Honors* – This honor is awarded to associate degree recipients who have a cumulative grade point average of 3.8-4.0.

*Associate Degree with Honors* – This honor is awarded to associate degree recipients who have earned a cumulative grade point average of 3.5-3.79.

*Certificate/Diploma with Honors* – This honor is awarded only to certificate and diploma recipients who have earned a cumulative grade point average of 3.5 or above in at least two semesters of work at the college.

### Academic Honors

To be eligible for Academic Honors, students must be pursuing a degree, diploma or certificate and receive no grades of “I” or “NC” during the term. Grades for zero-level courses (MAT 032, ENG 032 and RDG 032) are not included in the calculation of GPA or the required credit hours for academic honors.

*President’s List* – Each semester, students who earn a 4.0 grade point average in at least 12 credit hours (excluding zero-level courses) attempted at Midlands Technical College will be placed on the President’s List for that term and given appropriate recognition.

*Scholars’ List* – Each semester, students who earn a 3.5-3.99 grade point average in at least 12 credit hours (excluding zero-level courses) attempted will be placed on the Scholars’ List for that term and given appropriate recognition.

*Part-Time Student Honor Roll* – Each semester, students who earn a 3.8 grade point average or above in at least three credit hours but no more than 11 credit hours (excluding zero-level courses) will be placed on the Part-Time Student Honor Roll and given appropriate recognition.

At the end of each term, the Student Records Office will identify students eligible for the President’s List, the Scholar’s List and the Part-Time Student Honor Roll.

## Honor Societies

Midlands Technical College seeks to challenge all students to achieve their fullest potential and to provide continued extracurricular stimulation for those who are exceptional achievers.

*Phi Theta Kappa* is an international honor society for community college students. Students in associate degree programs who have earned at least 12 credit hours of college level work, who have cumulative GPAs of 3.5 or higher and who are nominated by their faculty will be eligible to join Phi Theta Kappa. Midlands Technical College sponsors the Alpha Eta Kappa chapter of Phi Theta Kappa.

*MTC Ambassador Assembly* is an honor/volunteer organization of outstanding students selected to represent MTC at college and community events. Members are selected on the basis of academic performance and extracurricular activities.

*National Technical Honor Society* - Midlands Technical College recognizes outstanding students enrolled in Career Programs majors through membership in the National Technical Honor Society (NTHS). After completing 12 semester hours in college-level coursework with a 3.0 GPA, students are eligible to seek faculty recommendations for induction into the NTHS.

## **Repeat Grade Policy**

When a course is repeated, all grades will be entered on the student's permanent academic record. For 100- and 200-level courses, the higher of the two grades will be included in the grade point average.

Certain departmental requirements may limit the number of times a course may be repeated.

Students who plan to transfer must realize the receiving college may recalculate grade point averages, including repeat grades, according to that college's policies.

Students receiving financial aid should know that all coursework attempted will be calculated in assessment of academic progress standards for student financial aid purposes.

## **Semester Credit Hour Requirements**

Midlands Technical College offers courses on a semester calendar. All requirements in this catalog are based on semester credit hours. Students who attended Midlands Technical College prior to the summer 1992 term must check with their advisors to carefully match the previous quarter hour requirements with new semester hour requirements.

## **Graduation Requirements**

All students who expect to receive a degree, diploma or certificate from Midlands Technical College must complete all of the following requirements. Specific course requirements for each major are defined later in this catalog.

### **General Requirements**

Regardless of the level of award, all students must meet the following requirements:

1. Satisfactory completion of all general education requirements and all academic major requirements specified for the award.
2. Completion of all program credit hours.
3. Completion of all academic course credit with a minimum of a cumulative 2.0 grade point average (GPA). In addition, certain programs may require higher GPAs in selected courses.
4. Fulfillment of all financial obligations to the college. A student may be graduated but will not receive their degree until all obligations have been met.
5. Completion of an application for graduation during the term the student plans to complete their academic requirements. The Graduation Application is available in Student Planning via MyMTC. The deadline for submission for each term is published in the college calendar. Student who do not submit an application for graduation will be administratively graduated by the college if the student has met all graduation requirements.

## Associate Degree Requirements

1. General education courses are classes in specific categories that form the foundation of each degree program (major). Programs may use different courses to meet general education core requirements. However, all of these courses are designed to prepare associate degree recipients to demonstrate the following knowledge, skills, and expertise:

*Communication* – Graduates should be able to generate and comprehend written, oral, and multi-media communication appropriate for a variety of audiences, purposes, and subjects.

*Analytical Reasoning, Problem-Solving, and Technology* – Graduates should be able to understand and use mathematical principles, analytical reasoning, and technological applications to critically evaluate data, solve problems, and effectively communicate findings verbally and graphically.

*Scientific Reasoning* – Graduates should understand and be able to use scientific methodology and principles.

*Individual or Social Behavior* – Graduates should understand factors which influence behavior. They should recognize the complex and dynamic nature of human actions and experience.

*Information Literacy* – Graduates should be able to recognize a need for information, access the information effectively and efficiently using various media, critically select and evaluate information and incorporate it into their knowledge base, and present information in an appropriate format for their audience and purpose.

*Humanities* – Graduates should understand the diversity of our cultural heritage and the effects of artistic or philosophical influences.

A minimum of 15-credit-hours must be taken in general education courses.

Integrated within all program curricula are other skills and philosophical approaches. Like the General Education Core, these reflect educational values and goals of the college; we believe them to be essential to the lifelong personal and professional growth of students. These include:

*Ethics* – the understanding through study and example that ethics and ethical behavior are an essential part of the process of higher education and professionalism in the workplace.

*Problem Solving & Critical Thinking* – the ability to use logic, creativity, and reasoning to solve problems, to make decisions, and to evaluate their implications.

*Collaboration* – the understanding of the rights and responsibilities of working with others through both study and participation in collective activities/projects.

*Global Awareness* – the ability to understand and respect diverse cultures for the sake of fostering harmonious relationships in our global community.

*Ecological Literacy* – the ability to understand and value the global ecosystem and to be aware of behaviors necessary for ecologically responsible global citizenship.

*Professionalism* – the ability to understand and perform to the standards of a given profession, including civility and work ethic.

2. Earn a minimum of 25 percent of the program course work in residence at Midlands Technical College.
3. Complete all other degree requirements.

### **Diploma Requirements**

1. Complete at least eight semester hours in approved general education courses. These courses are specified by the program.
2. Earn a minimum of 25 percent of the program course work in residence at Midlands Technical College.
3. Complete all other diploma requirements.

### **Certificate Requirements**

1. Each program contains specific requirements for graduation. Students should consult their certificate program advisor.
2. Earn a minimum of 25 percent of the program course work in residence at Midlands Technical College.

## **Transfer: State Policies and Procedures**

The Commission on Higher Education for the State of South Carolina is responsible for establishing policies and procedures for the transferability of courses at the undergraduate level between two- and four-year institutions. These policies and procedures are defined below. (For more information, see the Statewide Transfer and Articulation Center webpage at [sctrac.org](http://sctrac.org).)

### **Transfer Policy for Public Two-Year and Four-Year Institutions in South Carolina**

1. The South Carolina Course Articulation and Transfer System serves as the primary tool and source of information for transfer of academic credit between and among institutions of higher education in the state. The system provides institutions with the software tools needed to update and maintain course articulation and transfer information easily. The student interface of this system is the South Carolina Transfer and Articulation Center (SC TRAC) web portal: [www.SCTRAC.org](http://www.SCTRAC.org). This web portal is an integrated solution to meet the needs of South Carolina's public colleges and universities and their students and is designed to help students make better choices and avoid taking courses which will not count toward their degree. Each institution's student information system interfaces with [www.SCTRAC.org](http://www.SCTRAC.org) to help students and institutions by saving time and effort while ensuring accuracy and timeliness of information.

### **Admissions, Criteria, Course Grades, GPAs, Validations**

2. All four-year public institutions will issue annually in August a transfer guide or maintain such a guide online. Information published in transfer guides will cover at least the following items:
  - A. The institution's definition of a transfer student.
  - B. Requirements for admission both to the institution and, if more selective, requirements for admission to particular programs.
  - C. Institutional and, if more selective, programmatic maximums of course credits allowable in transfer.

- D. Information about course equivalencies and transfer agreements.
- E. Limitations placed by the institution or its programs for acceptance of standardized examinations (e.g., SAT, ACT) taken more than a given time ago, for academic coursework taken elsewhere, for coursework repeated due to failure, for coursework taken at another institution while the student is academically suspended at his/her home institution, and so forth.
- F. Information about institutional procedures used to calculate student applicants' Grade Point Averages (GPA) for transfer admission. Such procedures will describe how nonstandard grades (withdrawal, withdrawal failing, repeated course, etc.) are evaluated; and they will also describe whether all coursework taken prior to transfer or only coursework deemed appropriate to the student's intended four-year program of study is calculated for purposes of admission to the institution and/or to the programmatic major.
- G. Institutional policies related to "academic bankruptcy" (i.e., removing an entire transcript or parts thereof from a failed or underachieving record after a period of years has passed) so that re-entry into the four-year institution with course credit earned in the interim elsewhere is done without regard to the student's earlier record.
- H. "Residency requirements" for the minimum number of hours required to be earned at the institution for the degree.

### **South Carolina Transfer and Articulation Center (SC TRAC)**

3. All two- and four-year public institutions will publish information related to course articulation and transfer, including but not limited to items A through D mentioned above, on the South Carolina Transfer and Articulation Center website, SCTRAC.org.

Course equivalency information listing all courses accepted from each institution in the state (including the 86 courses in the Statewide Articulation Agreement) and their respective course equivalencies (including courses in the "free elective" category) will be made available on SCTRAC.org. This course equivalency information will be updated as equivalencies are added or changed and will be reviewed annually for accuracy.

Additionally, articulation agreements between public South Carolina institutions of higher education will be made available on SCTRAC.org, will be updated as articulation agreements are added or changed, and will be reviewed annually for accuracy. All other transfer information published on SCTRAC.org will be reviewed at least annually and updated as needed.

### **Statewide Articulation of 86 Courses (SC TRAC)**

4. The Statewide Articulation Agreement of 86 courses approved by the South Carolina Commission on Higher Education for transfer from two- to four-year public institutions is applicable to all public institutions, including two-year institutions and institutions within the same system. In instances where an institution does not have courses synonymous to ones on this list, it will identify comparable courses or course categories for acceptance of general education courses on the statewide list. This list of courses is available online at [che.sc.gov](http://che.sc.gov) as well as on SCTRAC.org.

## **Statewide Transfer Blocks**

5. The Statewide Transfer Blocks established in 1996 will be accepted in their totality toward meeting baccalaureate degree requirements at all four-year public institutions in relevant four-year degree programs. Several Transfer Blocks were updated in March 2009: Arts, Humanities, and Social Sciences; Business; Engineering; and Science and Mathematics. Transfer Blocks for Teacher Education were updated in July 2010. Transfer Blocks for Nursing were updated in July 2012. The courses listed in each Transfer Block will be reviewed periodically by the Commission's Academic Affairs staff in consultation with the Advisory Committee on Academic Programs to ensure their accuracy, and the Transfer Blocks will be updated as needed.
6. For the Nursing Transfer Block, by statewide agreement, at least 60 semester hours will be accepted by any public four-year institution toward the baccalaureate completion program (BSN) from graduates of any South Carolina public associate degree program in nursing (ADN), provided that the program is accredited by the National League for Nursing Accrediting Commission or the Commission on Collegiate Nursing Education and that the graduate has successfully passed the National Licensure Examination (NCLEX) and is a currently licensed Registered Nurse.
7. Any student who has completed either an Associate of Arts or Associate of Science degree program at any public two-year South Carolina institution which contains the total coursework found in the Arts, Humanities, and Social Sciences or the Science and Mathematics Transfer Block will automatically be entitled to junior-level status or its equivalent at whatever public senior institution to which the student might have been admitted. However, as agreed by the Advisory Committee on Academic Programs, junior status applies only to campus activities such as priority order for registration for courses, residence hall assignments, parking, athletic event tickets, etc. and not in calculating academic degree credits. For a complete listing of all courses in each Transfer Block, see [che.sc.gov](http://che.sc.gov).

## **Assurance of Transferability of Coursework Covered by the Transfer Policy**

8. Coursework (i.e., individual courses, transfer blocks, and statewide agreements) covered within this transfer policy will be transferable if the student has completed the coursework with a "C" grade (2.0 on a 4.0 scale) or above. However, the transfer of grades does not relieve the student of the obligation to meet any GPA requirements or other admissions requirements of the institution or program to which application has been made. In addition, any four-year institution which has institutional or programmatic admissions requirements for transfer students with cumulative grade point averages (GPAs) higher than 2.0 on a 4.0 scale will apply such entrance requirements equally to transfer students from regionally accredited South Carolina public institutions regardless of whether students are transferring from a four-year or two-year institution.
9. Any coursework covered within this transfer policy will be transferable to any public institution without any additional fee and without any further encumbrance such as a "validation examination," "placement examination/instrument," "verification instrument," or any other stricture, notwithstanding any institutional or system policy, procedure, or regulation to the contrary.

## **Assurance of Quality**

10. All claims from any public two- or four-year institution challenging the effective preparation of any other public institution's coursework for transfer purposes will be evaluated by the staff of the Commission on Higher Education in consultation with the Advisory Committee on Academic Programs. After these claims are evaluated, appropriate measures will be taken to ensure that the quality of the coursework has been reviewed and approved on a timely basis by sending and receiving institutions alike.

## **Transfer Officers**

11. Each institution will provide the contact information for the institution's Transfer Office personnel, including telephone numbers, office address, and e-mail address, on its website and on SCTRAC.org.

Transfer office personnel will:

- > Provide information and other appropriate support for students considering transfer and recent transfers.
- > Serve as a clearinghouse for information on issues of transfer in the state of South Carolina.
- > Provide definitive institutional rulings on transfer questions for the institution's students under these procedures.
- > Work closely with feeder institutions to assure ease in transfer for their students.

## **Statewide Publication and Distribution of Information on Transfer**

12. The staff of the Commission on Higher Education will place this document on the Commission's website under the title "Transfer Policies." In addition, information about transfer, including institutional policies, course equivalencies, and articulation agreements, will be published and distributed by all public institutions through transfer guides and be made available on SCTRAC.org.

Furthermore, course catalogs for each public two- and four-year institution will contain a section entitled "Transfer: State Policies and Procedures." This section will:

- A. Include the Transfer Policy for Public Two-Year and Four-Year Institutions in South Carolina.
- B. Refer interested parties to SCTRAC.org as well as to the institutional Transfer Guide and institutional and Commission on Higher Education's website at [che.sc.gov](http://che.sc.gov) for further information regarding transfer.

## **Articulation and Transfer**

Midlands Technical College is committed to working closely with public and private high schools to ensure students have the preparation they need to enter Midlands Technical College and to succeed in the programs of their choice. The college also works with other institutions of higher education to facilitate students' transfer of credits both into Midlands Technical College and from Midlands Technical College to other colleges.

Students wishing to transfer from Midlands Technical College to another college should contact that college for information about transferability of credits. Because the transfer of credits is always the decision of the receiving institution, Midlands Technical College cannot guarantee transfer of its courses, but articulation agreements are generally accurate guidelines for students.

Applicability and time limitations on transfer coursework will be determined at the receiving institution by the appropriate program's department chair or designee.

Students wishing to transfer to Midlands Technical College from another college should request that all previous colleges attended submit official transcripts to the Admissions Office. Midlands Technical College accepts electronic transcripts via Parchment, National Student Clearinghouse, as well as transcripts sent directly from a college or university to the Admissions email account at [admissions@midlandstech.edu](mailto:admissions@midlandstech.edu). These transcripts should be received at MTC no less than three (3) weeks prior to the published application deadline for a particular semester.

Although the Associate in Arts and the Associate in Science programs are the designated programs for students planning to transfer to other colleges and universities, there are articulation agreements through other majors including Criminal Justice, Early Care and Education, Human Services, Paralegal Studies, Engineering, and Nursing. Students should check with their program advisor about these agreements.

### **MTC Bridge Programs**

Midlands Technical College Bridge Programs provide opportunities for students to successfully transfer to selected four-year colleges and universities. Students planning to pursue a baccalaureate degree at a college with which Midlands Technical College has a Bridge Program agreement may participate in activities and special events at the partner college in addition to receiving information on admissions, financial aid, scholarships, and support programs.

Students may complete an Associate degree before transferring to the bridge partner college or complete a minimum of 30 semester hours of curriculum-level coursework at MTC prior to transferring. In any case, students must meet the minimum GPA requirement for the academic program to which they are transferring.

Current Bridge partners include Benedict College, Claflin University, Coker College, Columbia College, Lander University, Newberry College, South Carolina State University, and the University of South Carolina. For more information regarding Midlands Technical College's Bridge partners, visit [MIDLANDSTECH.EDU/bridge](http://MIDLANDSTECH.EDU/bridge).

### **The REACH Act Requirement for Students Pursuing a 4-Year Degree**

The South Carolina REACH Act (Reinforcing College Education on America's Constitutional Heritage) requires all students graduating with a baccalaureate degree to successfully complete a 3-credit-hour course (or its equivalent) that covers the founding documents of the United States. These documents include the United States Constitution, the Declaration of Independence, the Emancipation Proclamation, at least five Federalist Papers, and at least and one document that is foundational to the African American Freedom struggle.

Students may take HIS 201 (American History: Discovery to 1877) or PSC 201 (American Government) at MTC to meet this requirement prior to transfer, or they may choose to meet the requirement via coursework taken at their transfer destination.

## **Release of Student Information**

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, prescribes the conditions under which information about students can be released. It is the policy of Midlands Technical College to follow those guidelines to protect the privacy of students. The following student rights are covered by the Act and afforded to all eligible students of the college:

1. The right to inspect and review information in the student's educational records.
2. The right to request amendment of the contents of the student's educational records if believed to be inaccurate, misleading or otherwise in violation of the student's privacy or other rights.
3. The right to prevent disclosure without consent, with certain exceptions, of personally identifiable information from the student's informational records.
4. The right to secure a copy of the college's policy.
5. The right to file complaints with the US Department of Education concerning alleged failures by the college to comply with the provisions of the Act.

Each of these rights, with any limitations or exceptions, is explained in the college's policy statement, which may be received from the Registrar's Office.

The college may provide directory information in accordance with the provisions of the Act without written consent of an eligible student, unless that student requests in writing that such information not be disclosed. The following items are designated as directory information and may be released on any student for any purpose at the discretion of the college unless a written request for nondisclosure is on file: name, address, telephone listing, photograph and video, enrollment, dates of attendance, participation in officially recognized activities and sports, weight and height of members of sports teams, the most recent previous institution attended, major field of study, and degrees and awards received.

Students who wish to request nondisclosure of the above items may complete a Nondisclosure Form available from the Student Records Office.

## **Campus Environment**

Midlands Technical College intends to provide a campus environment conducive to learning and to the successful attainment of student goals. Respect for the rights of others, openness to new and different ideas, acceptance of individuals from diverse backgrounds and cultures, and belief in the worth and dignity of all people are encouraged. The Midlands Technical College Student Code reinforces this concept and outlines the rights and responsibilities of students.

### **Student Right to Know**

Information about Midlands Technical College's graduation rate is available from the Office of Assessment, Research and Planning; is on the Office of the Registrar's (Records Office) web page; is provided as a link on the college application; and is provided on the Midlands Technical College Student Right to Know Graduation, Retention and Job Placement webpage at <https://www.midlandstech.edu/about/consumer-information/student-right-know-graduation-retention-and-job-placement>. Information about Midlands Technical College's annual security report, institutional security policies and crime statistics are available from the Campus Security Office and are

provided on the college's website at <https://www.midlandstech.edu/sites/default/files/mtc/about/annualsecurityreport.pdf>. The information is also annually mailed to individual students' college email addresses. Other types of compliance and consumer information may be found on the college website at [WWW.MIDLANDSTECH.EDU/about/compliance-and-consumer-information](http://WWW.MIDLANDSTECH.EDU/about/compliance-and-consumer-information).

## **Alcohol/Drugs Policy**

Midlands Technical College seeks to provide a drug-free, healthy, safe and secure work and educational environment. Employees and students are required and expected to report to their work, class or student activities in appropriate mental and physical condition to meet the requirements and expectations of their respective roles.

Midlands Technical College prohibits the unlawful manufacture, distribution, dispensation, possession or use of narcotics, drugs, or other controlled substances or alcohol at the workplace and in the educational setting. Unlawful for these purposes means in violation of federal/state/local regulations, policies, procedures, rules and legal statutes. Workplace means either on college premises or while conducting college business away from the college premises. Educational setting includes institutional premises, approved educational sites off campus, and any off-campus location during college-sponsored events and activities.

To prevent the consequences of alcohol and other drug abuse at the workplace and in the educational setting, Midlands Technical College and the South Carolina Technical College System have implemented this policy to ensure a drug-free work and educational environment.

Midlands Technical College recognizes that chemical dependency through the use of controlled or uncontrolled substances, including alcohol, is a treatable illness. The college supports and recommends employee and student rehabilitation and assistance programs, and it encourages employees and students to use such programs. Midlands Technical College also performs a biennial review of alcohol and drug policies, programs, incidents, and needs and uses this information in the development, adjustment and implementation of related policies, procedures and programs.

The college will implement drug-free awareness programs for employees and students. Such programs will annually ensure employees and students are aware that:

Alcohol and other drug abuse at the workplace and in the educational setting is dangerous because it leads to physical impairment, loss of judgment, safety violations, and the risk of injury, poor health or even death. The health risks and effects of controlled substances and alcohol will be provided to students and employees.

Alcohol and other drug abuse can significantly lower performance on the job and in the classroom, thus adversely affecting the college and the college's mission, as well as seriously affecting a student's educational and career goals.

Employees must report any personal conviction under a criminal drug statute for conduct at the workplace to their human resource officer within five days. Management must report to granting agencies any employee conviction for conduct in the workplace within ten days of receiving notice.

It is a condition of employment and enrollment that all employees and students must abide by the policy on alcohol and other drug use as well as related procedures, statements, laws and guidelines. Violation of any provisions may result in disciplinary action up to and including termination or expulsion respectively, and may have further legal consequences consistent with federal and state laws

and regulations. Additionally, management may require an employee or student to enter an employee/ student assistance or drug rehabilitation program as a condition of employment or enrollment. In addition, management is specifically required by law to take appropriate action within 30 days of receiving notice of any employee's conviction for conduct in the workplace.

Use of employee assistance programs (EAP), student assistance programs (SAP) or drug/alcohol rehabilitation services is encouraged.

For information on substances that can cause chemical dependence and their side effects and health risks, please visit the Student Life Office on either campus or obtain information online at [WWW.MIDLANDSTECH.EDU/about/compliance-and-consumer-information](http://WWW.MIDLANDSTECH.EDU/about/compliance-and-consumer-information).

### **Parking**

Students are required to register their vehicles and display a student parking permit on the driver's side rear window or bumper of their vehicles to park on campus property. Students may park only in white-lined spaces.

More specific information on traffic regulations is published online and in the *Student Handbook*.

### **Safety and Security**

Midlands Technical College complies with guidelines of the Environmental Protection Agency (EPA) and the Federal Occupational Safety and Health Act (OSHA) to ensure a safe environment. When necessary, personnel are required to wear protective equipment to prevent injury. The cost of equipment is listed under the specific curriculum in this catalog, and can be obtained from the bookstore. For the safety and security of the campus environment, MTC uses video surveillance on all of its campuses. In addition, Midlands Technical College adheres to the guidelines of the Campus Security Act and the Campus SaVE Act. Campus Security information is available to all students and applicants at the Student Information Centers on Airport and Beltline campuses. In addition, campus security and crime information is available on the college's website.

### **Smoking and Tobacco Use**

In the interest of a healthier environment, the college prohibits smoking and tobacco use on its property.

### **Student Complaints**

As members of the academic community, students are entitled to all rights and responsibilities accorded them by the laws of this community. The process by which students may file grievances concerning harassment, discrimination and other academic matters is outlined in the Midlands Technical College *Student Handbook*, which is available on the college's website, [https://www.midlandstech.edu/sites/default/files/MTC\\_student\\_handbook.pdf](https://www.midlandstech.edu/sites/default/files/MTC_student_handbook.pdf).

### **Surveillance**

Midlands Technical College uses video surveillance on all of its campuses for safety and security purposes.

### **Disability Services**

Midlands Technical College provides accommodations, as appropriate, to individuals who have documented disabilities. Students interested in receiving information about

accommodations and services should contact a counselor in the Counseling and Career Services office. To ensure the quality and availability of services, the college requests students with disabilities notify Counseling Services of any special accommodation needs at least 10 working days prior to the first day of class. Information concerning registering to receive disability accommodations can be found on the Counseling and Career Services website at MIDLANDSTECH.EDU/counseling.

Students who are dissatisfied with disability services or accommodations should first seek to resolve the concern through the Disability Services Coordinator in the Counseling and Career Services Office. An appeal may then be made to the Assistant Vice President of Counseling and Support Programs concerning unresolved issues. If the issue is still not resolved, the student may follow the student grievance procedure outlined in the Midlands Technical College *Student Handbook*.

### **English Fluency of Faculty Members**

When a student files a written complaint with the department chair regarding the English fluency of an instructor, the department chair will immediately alert the Vice Provost for Academic Affairs who shall refer the instructor within 10 working days to the English Fluency Evaluation Committee for a proficiency evaluation.

An instructor who is judged proficient by the committee will continue teaching assignments without any further action. If student complaints continue, however, or the supervisor determines a continuing fluency or communication problem exists, appropriate action can be initiated.

A permanent instructor judged deficient by the committee will be given one academic term to develop sufficient English fluency to be judged proficient by the committee. If, during the term, the instructor has not shown evidence of satisfactory progress in overcoming the deficiency, disciplinary action may be taken, up to and including termination.

An adjunct instructor judged deficient by the committee may be immediately terminated.

### **Student Conduct**

The college reserves the right to maintain a safe and orderly educational environment in keeping with the policy on campus environment. When in the judgment of officials a student's conduct disrupts or threatens to disrupt the college community, appropriate disciplinary action will be taken to restore and protect the well-being of the community. The purpose of the Student Code (complete policy and procedures are in the *Student Handbook*) is not to restrict student rights but to protect the rights of individuals in their academic pursuits.

### **MTC Honor Code**

Midlands Technical College is committed to the value of integrity. In support of this value and the development of student academic competence, the college has adopted the following honor code:

*As a member of the Midlands Technical College community, I will adhere to the College's Student Code. I will act honorably, responsibly, and with academic integrity and honesty. I will be responsible for my own academic work and will neither give nor receive unauthorized or unacknowledged aid. I will behave courteously to all members of the MTC community and its guests and will respect college property and the property of others.*

# General Information



## Campuses and Centers

Midlands Technical College is a multi-campus college serving Richland, Lexington and Fairfield county residents in South Carolina. The college operates six campuses: Airport Campus (West Columbia, in Lexington County), Batesburg-Leesville Campus (in Lexington County), Beltline Campus (Columbia, in Richland County), Harbison Campus (Irmo, in Lexington County), Northeast Campus (Columbia, in Richland County), and Fairfield Campus (Fairfield County). The college also operates the Fort Jackson Center located at the Army Continuing Education Center, Fort Jackson.

### **Airport Campus**

The Airport Campus is located on 65 acres on Lexington Drive in West Columbia. It was originally the training site for (Gen. Jimmy) “Doolittle’s Raiders” during World War II. Later it housed the South Carolina Area Trade School—Columbia Campus and the Columbia Technical Education Center. The campus now consists of 420,000 square feet of classroom, workshop, library, laboratory and support space. A 45,000 square foot Student Center, which houses all of the student service functions plus the bookstore, cafeteria, and Student Commons, was completed in 1996. Construction was completed on a 34,000 square foot Advanced Manufacturing and Skilled Crafts Center adjacent to Springdale Hall in 2014.

### **Batesburg-Leesville Campus**

In fall 2007, the college opened the Batesburg-Leesville Campus in western Lexington County. The campus, located on College Street in Batesburg-Leesville, is home to an 8,025 square foot education facility that contains classrooms, faculty and staff offices

and student support space. Educational offerings at the campus include general education and career courses as well as corporate and continuing education programs.

### **Beltline Campus**

The Beltline Campus, located at 316 South Beltline Boulevard in southeast Columbia, was originally established in 1963 as the Richland Technical Education Center. The campus includes 11 facilities with 364,062 square feet on 22 landscaped acres. The 25,000 square foot Student Center was completed in the fall of 1998 and a parking garage/automotive training facility of 117,000 square feet was completed in fall of 1999. In fall 2005, the Student Center was expanded, and a Precision Manufacturing facility was added. In 2017, the new Learning Resource Center was completed to house the Library, Academic Success Center, Life Skills Center, and general purpose classrooms.

### **Fairfield Campus**

The Fairfield Campus, located at 1674 Hwy 321 North Business in Winnsboro, SC, is a 10,600 square foot facility with several classrooms and industrial bays. Programs offered at the site include MTC QuickJobs programs in areas such as health care, information technology, and industrial technologies. Also offered are general education courses and workforce readiness programs.

### **Harbison Campus**

Harbison Campus, located on College Street in Irmo, opened its doors to students in September 1980. The 19 wooded acres and six buildings, consisting of 30,300 square feet, were generously donated by the Harbison Development Corporation. The campus was originally the site of Harbison Junior College, which closed in 1958. Today the campus offers credit courses, short courses, seminars, workshops and conferences to upgrade job skills and enhance professional development. There are also a variety of corporate and continuing education programs for people who want to take courses for personal interest.

The Harbison Campus is also home to Harbison Theatre at Midlands Technical College. This technologically advanced performing arts venue, which opened in 2010, hosts professional touring productions from around the world, contributing to a quality of life in the Midlands that reflects the quality of education offered at the college. Rooted in the performing arts, Harbison Theatre at Midlands Technical College offers programs and productions that encourage reflection, examination and discovery; and that provide entertainment, education and opportunity to professionals, learners and community members in all stages of life. More information about Harbison Theatre may be found at [HarbisonTheatre.org](http://HarbisonTheatre.org).

### **Northeast Campus**

In 1989, Midlands Technical College recognized that current and projected trends in enrollment growth would require a significant expansion of facilities. Studies initiated that year resulted in the eventual purchase, in December 1991, of 150 acres in the northeast sector of Richland County to serve as a regional campus. The site is located adjacent to the Carolina Research Park at 151 Powell Road. The original Master Plan developed in 1992 utilized the entire 150 acre site to house 11 buildings comprised of 387,000 square feet. The college recognized that a more efficient layout of the Northeast Campus was possible. In 1999, the college developed a Master Plan that utilizes only 50 acres but still provides seven buildings with a total of at least 400,000 square feet. In 2003, the Northeast Campus was established with the construction of the 50,000 square foot Center of Excellence for Technology. The facility specializes

in information technology and advanced manufacturing training. In 2013, the campus expanded with the Engineering Technology and Sciences Building. This four story state-of-the-art classroom and lab facility houses programs that prepare students for careers in regional technology-based industries. The Northeast Campus is also home to the 150 acre Enterprise Campus at Midlands Technical College. This partnership between the college and the private sector provides an innovative space where work blends with education.

### **Off-Campus Locations**

The Army Continuing Education Center at Fort Jackson offers credit courses in areas such as Management, Criminal Justice Technology, English, history, and more.

Courses for dual credit are offered on-site at many local high schools in the college's service area.

All off-campus instruction is delivered through the regular full-time faculty of the college and qualified part-time faculty. Staff, resources and facilities are carefully coordinated to provide off-campus students the best possible service.

## **College History**

The present-day Midlands Technical College is the product of a rich and unique history. Never before had a public trade school, a public technical education center and a private junior college merged to form a comprehensive two-year technical/community college in South Carolina.

In 1947, the South Carolina Area Trade Schools (SCATS) Act established the South Carolina Area Trade School–Columbia Campus to provide skilled and educated workers to meet the expanding labor needs of the community. In 1969, the name was changed to Columbia Technical Education Center (TEC) and it became part of the State Committee for Technical Education, which was responsible for guiding the technical programs in the state. The site of the Columbia Technical Education Center is now the Airport Campus of Midlands Technical College.

Richland Technical Education Center (Richland TEC) was established in 1963 to address the need for specialized training for industrial growth, and the first students were enrolled in the fall of 1963. By 1969, the school's enrollment expanded to 1,200 students and Lexington County officials joined forces with Richland County to form the Richland-Lexington Counties Commission for Technical Education. With this partnership, the name of the school was changed to Midlands Technical Education Center (TEC).

Approximately 15,500 students were enrolled in Midlands Technical Education Center between the years 1969-1974. Major programs of study were offered in industrial and engineering technologies, business and allied health. The site of the Midlands Technical Education Center is now the Beltline Campus of Midlands Technical College.

Palmer College in Columbia, a private business college, joined with the State Board for Technical and Comprehensive Education in 1973. At that time, Palmer College annually enrolled 1,000 students in 16 associate degree and diploma programs. On March 21, 1973, the Columbia Technical Education Center, Midlands Technical Education Center and Palmer College in Columbia merged to form a single, multi-campus college. This new college operated as three separate entities governed by one local commission through June 1974. On July 1 of that year, the three separate institutions merged to form

Midlands Technical College under the guidance of the Richland-Lexington Counties Commission for Technical Education.

Accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (SACS), Midlands Technical College provides a variety of educational opportunities that support its mission of human resource development in support of economic development.

More than 100 associate degree, diploma and certificate programs of study are offered. A strong college transfer program has evolved to allow students the opportunity to take the first two years of a baccalaureate degree and transfer to one of the state's four-year institutions. Midlands Technical College is currently the largest feeder college to Columbia College and the University of South Carolina.

Midlands Technical College provides corporate and continuing education opportunities and has more than 25,000 enrollments annually and is the largest provider of corporate and continuing education of any college in the state. Off-campus sites provide classes for many residents.

More than 80 percent of MTC graduates who do not continue their education after graduation are employed in jobs related to their field of study. State-of-the-art equipment, a well-qualified faculty and staff, and hands-on experience give Midlands Technical College's students the high-quality education and training they need to successfully compete in the marketplace.

MTC's students are all ages — the average fall enrollment being 25 years old — and there are more females (60%) than males. The college employs 617 full-time people (fall, 2017).

This 2021-2022 catalog attests to the Midlands Technical College tradition. The college's solid foundation in the past, together with the vision for excellence in the future, ensure citizens and students alike will be proud to call Midlands Technical College their college.

## **Programs and Pathways Offered**

Midlands Technical College offers more than 100 different credit programs and pathways leading to associate degrees, diplomas and certificates. The table below summarizes these programs and pathways and indicates the campus (AC for Airport Campus, BC for Beltline Campus, HC for Harbison Campus, I for Internet, NE for Northeast Campus, and OC for Off-Campus) where programs are offered.

All courses required for a program award are not guaranteed at all sites or in all time blocks. The college reserves the right to cancel courses when there is insufficient enrollment.

### **Program/Pathway**

### **Campus**

#### **Associate Degree Programs/Pathways**

Accounting .....	AC, BC
Administrative Office Technology.....	AC, BC
Anthropology.....	AC, BC
Applied Psychology.....	AC, BC
Architectural Engineering Technology.....	NE
Associate in Arts – Interdisciplinary Studies.....	AC, BC, I
Associate in Science – Interdisciplinary Studies.....	AC, BC, I

Art Studio.....	AC
Automotive Technology.....	BC
Biological Psychology.....	AC, BC
Biology.....	AC, BC
Building Construction Technology.....	AC
Business Transfer.....	AC, BC
Chemistry.....	AC, BC
Civil Engineering Technology.....	NE
Commercial Graphics Communications.....	AC
Computer Technology.....	AC, BC
Applications Developer	
Web Developer	
Criminal Justice Technology.....	AC, BC, I, OC (Fort Jackson)
Dental Hygiene.....	AC
Early Care and Education.....	AC, BC
Education Transfer.....	AC, BC
Early Childhood and Elementary	
Middle Level	
Electronics Engineering Technology.....	NE
Emergency Medical Technology (Paramedic).....	AC
English.....	AC, BC
Engineering Fundamentals.....	NE
Engineering Fundamentals with Concentration in Chemical Engineering	
Engineering Fundamentals with Concentration in Civil Engineering	
Engineering Fundamentals with Concentration in Computer Engineering	
Engineering Fundamentals with Concentration in Computer Information	
Science Engineering	
Engineering Fundamentals with Concentration in Computer Science Engineering	
Engineering Fundamentals with Concentration in Electrical Engineering	
Engineering Fundamentals with Concentration in Mechanical Engineering	
Forensic Psychology.....	AC, BC
General Technology.....	AC, BC, NE
General Technology/General Technology for Health Care.....	AC
Heating, Ventilation, Air Conditioning/Refrigeration Technology.....	AC
Geography.....	AC, BC
History.....	AC, BC
Human Services.....	AC, BC
Machine Tool Technology.....	BC
Management.....	AC, BC, OC (Fort Jackson)
Management with Certificate in Entrepreneurship	
Management with Certificate in Public Administration	
Management with Certificate in Sales and Retail Management	
Management with Certificate in Supervision	
Marketing.....	AC, BC, OC (Fort Jackson)
Marketing with Certificate in Digital Marketing	
Marketing with Certificate in Integrated Marketing Communications	
Marketing with Certificate in Sales and Retail Management	
Mathematics.....	AC, BC, NE
Accelerated Mathematics	
Mechanical Engineering Technology.....	NE
Mechatronics Technology.....	NE

Medical Laboratory Technology.....	AC
Network Systems Management.....	BC
Nursing (ADN).....	AC
Paralegal Studies.....	AC, BC
Physical Sciences.....	NE
Physical Therapist Assistant.....	AC
Political Science.....	AC, BC
American Government	
International Relations	
Pre-Professional Sciences.....	AC, BC, NE
Radiologic Technology.....	AC
Respiratory Care.....	AC
Sociology.....	AC, BC
Supply Chain Management (transfer to Darla Moore School of Business).....	AC, BC
Welding Technology (pending approval).....	AC
Writing.....	AC, BC

### **Diploma Programs/Pathways**

Air Conditioning/Refrigeration Mechanics.....	AC
Expanded Duty Dental Assisting.....	AC
Industrial Electricity/Electronics.....	AC
Machine Tool.....	BC
Practical Nursing (PN).....	AC
Surgical Technology.....	AC

### **Certificate Programs/Pathways**

Accounting.....	AC, BC, OC (Harbison)
Advanced Certification in Cardiac and Vascular Interventional Radiology (pending approval).....	AC
American Sign Language.....	AC, HC
Applications Programming.....	AC, BC
Architectural Computer Graphics.....	NE
Architectural Design Technology.....	NE
Architectural Systems and Codes.....	NE
Automotive:.....	BC
Automotive Heating and Air Conditioning Repair	
Brake, Suspension and Steering Repair	
Drive Train Repair	
Electrical System Repair	
Engine Performance	
Engine Repair	
Basic Electrical Wiring.....	AC
Cardiac Care Technician.....	AC
Carpentry.....	AC
Chemical Process Technology.....	NE
Chemical Technology.....	NE
Community Pharmacy Technician.....	AC
Computed Tomography.....	AC
Computer-Aided Design.....	NE
Construction Engineering Technology.....	NE
Criminal Justice.....	AC, BC, I, OC (Fort Jackson)

Customer Service.....	AC, BC
Cyber Information Assurance.....	BC
Database Development.....	AC, BC
Digital Marketing.....	AC, BC
Early Childhood Development.....	AC, BC, NE, OC (BL-Fairfield)
Electronics and Computer Fundamentals.....	NE
Emergency Medical Technology (Paramedic).....	AC
Engineering Science.....	NE
Entrepreneurship.....	AC, BC
Environmental Systems Technology.....	NE
Heating/Ventilation/Air Conditioning/Refrigeration.....	AC
Help Desk.....	BC
Homeland Security.....	AC, BC
Industrial Electricity.....	AC
Integrated Marketing Communications.....	AC, BC
Machine Tool.....	BC
Manufacturing Process Technology.....	NE
Mechanical Technology Fundamentals.....	NE
Mechatronics Technology I.....	NE
Medical Assisting.....	AC
Medical Office Administrative Assistant.....	AC
Networking Specialist.....	BC
Nuclear Medicine Technology.....	AC
Nursing Assistant.....	AC
Office Support Specialist.....	AC, BC
Paralegal Studies.....	AC, BC
Phlebotomy.....	AC
Police Pre-Academy Training (pending approval).....	AC
Pre-Nursing.....	AC
Public Administration.....	AC, BC
Renewable Energy Technician.....	AC
Routing and Network Configuration.....	BC
Sales & Retail Management.....	AC, BC
Structural Technology.....	NE
Supervision.....	AC, BC
Surveying Fundamentals.....	NE
Web Design and Maintenance.....	AC
Welding and Cutting Fundamentals (pending approval).....	AC
Welding Qualifications.....	AC

### **Cooperative Programs**

(General Education Component Only: Clinicals available only through Greenville Technical College)

Pre-Occupational Therapy Assistant.....	AC, BC
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### **Distance Learning**

Distance learning technology brings together students and instructors who are not physically located in the same location. Midlands Technical College offers multiple approaches to distance learning. For any mode of instruction that occurs at a distance, it is expected that students have reliable high-speed internet access. All distance

learning courses are conducted through the college's learning management system, D2L Brightspace.

One type of distance learning course is an online course. Online courses are asynchronous, which means they do not meet at set days and times throughout the week. However, students are expected to work independently, and assignments are due on specific dates throughout the semester. All students who desire to take an online course are required to complete a readiness course, titled Virtual Backpack: Starting Your Online Journey, prior to registering for their first online course. Each MTC student is automatically registered for this course in D2L Brightspace upon being admitted to the college, and the short Virtual Backpack course can be completed anytime.

Another type of distance learning course is a hybrid course. Hybrid courses have a mix of on-ground and online components. Typically hybrid classes replace some in-class instruction with online activities.

The final type of distance learning course is a virtual course. Virtual courses meet synchronously online via web conferencing software, which means they meet at set days and times during the week. For questions related to distance learning courses, please contact the Center for Teaching Excellence at CTE@midlandstech.edu.

## **Tuition and Fees**

Midlands Technical College offers one of the most economical opportunities for post-secondary education in South Carolina. Tuition and fees are set by the Midlands Technical College Commission within guidelines established by the South Carolina State Board for Technical and Comprehensive Education. Tuition and fees are subject to change, by board action, without notice. Please reference the MTC webpage on "Tuition and Fees" for the current amounts.

### **Tuition**

Tuition is set on a sliding scale based upon the student's legal residence as defined in the Code of Laws of South Carolina, guidelines promulgated by the South Carolina Commission on Higher Education and the Midlands Technical College Commission. Those students who live in Richland and Lexington counties pay the lowest fees because a portion of their tax dollars funds the college. Other students from South Carolina pay a lower fee than out-of-state students because the college derives part of its support from state revenues. The college sets special tuition rates for military members and their dependents and for students from Fairfield County, depending on location and current county funding. Senior citizens may be eligible for tuition exemption provided they meet eligibility guidelines and courses are taken on a space-available basis.

### **Student Fees**

An application fee is charged to all students applying to the college.

An enrollment fee is charged to all first-time students enrolling in the college. A student fee is assessed each semester to each student. A late registration fee is assessed to students who register after the end of fee payment deadline for each designated term.

**Fees are nonrefundable.**

Those students who fail to pay their fees during regular registration periods and are processed after this period will be assessed a nonrefundable fee for late registration.

## **Payment of Tuition and Fees**

Students are expected to meet all financial obligations when due. Accounts in excess of 90 days past due will be processed through the college's collection procedures. Should these collection efforts fail, the balance due will then be submitted to the SC Department of Revenue for the tax refund Setoff Debt and GEAR programs. Any collection cost and charges, along with all attorneys' fees necessary for the collection of any debt to the college, may be charged to and paid by the debtor. Students must satisfy all financial obligations to the college in order to register for future semesters and to receive college transcripts.

Payment will be required if a student does not attend class(es) and does not officially withdraw. If payment is not received, students will be billed for classes and the debt will be processed through the college's collection procedures.

## **International Student Escrow Deposit**

International students accepted for admission will be required to deposit a sum equal to two semesters' tuition and fees with the college's Finance Office in an escrow account before being issued an I-20P.

International student course fees/tuition assessed at registration may be applied against the student's escrow account.

Refunds from the escrow accounts of international students will not be made without the advance approval of the International Admissions Coordinator or the Director of Admissions.

Should an international student transfer to another college under approved Immigration and Naturalization Service procedures or return to his/her home country with no intention of returning to the college, the balance of the escrow account may be refunded to the student upon written request by the student and approval by the International Student Services Manager or the Director of Admissions.

## **Method of Payment**

Tuition and fees can be paid by cash, check, money order, MasterCard, VISA, Discover and American Express. A service fee will be applied to all card transactions used to pay tuition and fees. A \$30 handling fee will be charged for dishonored checks. When a check is returned to the college the second time for insufficient funds, account closed, or stop payment, collection procedures will be implemented. Any or all of the above may result in the student being placed on a cash-only status, meaning checks will no longer be accepted as payment.

A student choosing to pay by any means other than cash must show positive identification.

Payments may be made online at MIDLANDSTECH.EDU through MyMTC, by mail, or in person at any Cashier's Office.

Students may use the tuition management plan offered through Nelnet. Details may be obtained by selecting the Nelnet payment plan options online at MIDLANDSTECH.EDU through MyMTC.

## **Sponsorships**

An employer or other organization may have a sponsorship program to pay directly to Midlands Technical College a portion or all of student tuition, fees and/or books.

To ensure that classes are not deleted, submission of proper documentation to the Accounts Receivable Department (Reed Hall, Airport Campus), or the nearest Cashier's Office must be made at least five business days before the end of fee payment for each semester/term.

Bookstore charge allowances will be processed within three business days from receipt of documentation.

### **Books**

The cost of books varies among courses. The Bookstore staff will provide assistance in identifying the books needed and the price for those books. Textbook and price information can also be accessed on the college course search website: MIDLANDSTECH.EDU.

### **Additional Costs**

There are additional costs for equipment for some programs such as tool kits for Automotive students, calculators for Engineering Technology students and uniforms and supplies for students in Nursing, Health Sciences and Industrial Technology programs. Information regarding additional costs for these programs and others may be requested through an Admissions Counselor, the appropriate academic department or the Bookstore.

In most cases, these items are available in the bookstores. Some of these costs are described in the sections of this catalog associated with curriculum programs.

## **Refund Procedure**

### *I. Institutional Refund Procedures*

All students must officially drop classes in order to receive a full or partial refund. To officially withdraw, a student must complete a Drop/Add/Withdrawal Form and submit it to the Student Records Office located on the Airport or Beltline campus. The Drop/Add/Withdrawal Forms may be obtained at the Student Records Office on each campus.

Web-enabled students may officially drop courses via the web through the published schedule change period. After the published schedule change period, all student withdrawals must be processed through the Student Records Office. NOTE: International students on F-1 visas should contact the Student Records Office and the International Student Services Manager prior to dropping courses or withdrawing from classes.

Refunds take approximately three to four weeks to process. The amount of the refund will be based on the date the completed form is received by the Student Records Office, according to the Institutional Refund Schedule below. All fees are nonrefundable.

<b>Withdrawal or Net Reduction of Credit Hours</b>	<b>Percent of Refund</b>
--------------------------------------------------------	------------------------------

1st - 5th instructional day of the term	100%
After 5th instructional day of the term	0%

Refunds for terms that vary in length from the semester term will be in proportion to the semester term refund schedule. Specific dates and percentages for each term are listed on the Midlands Technical College website.

## *II. Refund for Cancelled Courses*

If the college cancels a course for any reason, enrolled students will automatically receive the appropriate refund, if due. No forms need to be completed by the student. Refunds may be expected after the end of the schedule change period.

## *III. Refund for Student-Initiated Course Change or Withdrawal*

Students wishing to drop/add/withdraw from a course or from the college should obtain and complete a Drop/Add/Withdrawal form. Through the published Schedule Change period, course drops may also be completed online by students who have been web-enabled. After this date, withdrawals must be processed through the Student Records Office. These forms are available from the Student Records Office. NOTE: International students on F-1 visas should contact the Student Records Office and the International Student Services Manager prior to dropping courses or withdrawing from classes.

Refunds due to a student as a result of dropping courses will be automatically calculated and mailed to the student's last known address or to the agency paying the fees within approximately three to four weeks from the date of the drop with the exceptions listed in part IV below.

## *IV. Federal Financial Aid Recipients*

Students who do not attend class(es) will need to officially drop within the appropriate refund period.

Students who receive federal financial aid will earn the entire award after 60 percent of the term has been completed.

### *Partial Withdrawals*

A credit balance for tuition refunds to federal financial aid recipients will not be issued until the student completes 60 percent of the term. Students receiving federal financial aid who withdraw from a course before this time will not receive a refund for that course.

### *Complete Withdrawals*

Any student who completely withdraws from all classes in a term prior to completing 60 percent of the term will owe a portion of tuition and fees to the college based on the length of time the student was enrolled. Immediate repayment may be required.

A student may also owe the federal government a portion of the federal funds disbursed. Immediate repayment may be required.

# Student Services and Activities



## Bookstores

Bookstores are located on the Airport and Beltline campuses. The Bookstore can also be accessed on the Internet at [www.midlandstech.bncollege.com](http://www.midlandstech.bncollege.com). The bookstores offer book rental and digital course materials in addition to new and used textbooks for academic and continuing education courses. The bookstores sell reference books and a broad selection of school supplies including electronic items, art supplies, and computer, drafting, and graphics equipment. Medical supplies and kits, which are needed for all Nursing and Health Sciences programs, are available at the Airport Campus Bookstore. Also, the bookstores sell snack foods and beverages. Academic-priced computer software is available to all current students via [www.thinkedu.com](http://www.thinkedu.com). A large selection of Nursing and Health Sciences reference books and Health Sciences apparel is available at the Airport Campus Bookstore.

## CAREERS

(College Activities Reap Educational Experiences Resulting in Success)

CAREERS is designed to help adults who lack job or educational experience but who demonstrate the ability and commitment to enter promising career fields.

Funded by the USDOE (U.S. Department of Education) Strengthening Career and Technical Education for the 21st Century Act (Perkins V) grant, CAREERS assists economically disadvantaged men and women in career and technical education credit programs. Special populations served by the grant include individuals with disabilities; individuals from economically disadvantaged families; including low- income youth and adults, individuals preparing for non-traditional fields (e.g., females enrolled in

engineering, males enrolled in nursing); single parents including pregnant women; out-of-workforce individuals; English learners; homeless individuals; youth are in, or have aged out of, the foster care system; and youth with a parent who is a member of the armed forces; and is on active duty.

### **Benefits**

- > Financial assistance for books or childcare
- > Exposure to career opportunities
- > Enhanced personal, professional and academic development
- > Individual support, counseling and guidance
- > Networking

### **Eligibility**

- > Students must have completed a FAFSA and be receiving financial assistance through MTC's Student Financial Services department (SFS). Financial need is used to determine eligibility.
- > Students must be enrolled MTC credit programs leading to associate degrees, certificates or diplomas. Exceptions include: Associate in Arts, Associate in Science, and any certificates that begin with "Pre-"(i.e. Pre-Health Care or Pre-Nursing).
- > Students must have at least a cumulative 2.5 GPA.
- > Additional criteria may apply.

## **Child-Care Referral**

According to Midlands Technical College's policy, faculty, staff and students shall not bring children to class, lab work, or other designated programming facilities, nor leave children unattended on campus. In addition, children should not be brought to the Student Commons, the Library, the Academic Success Center or any sponsored events unless it is noted as an event designed for the entire family. This policy is designed to support a classroom and college environment conducive to learning and to avoid unsafe conditions for minors. The college assumes no responsibility for the supervision of faculty members', staff members' or students' children. Midlands Technical College's childcare referral service can help students identify a child-care provider to meet their needs. Child care referral information is available online at <https://mymtc1.MIDLANDSTECH.EDU/StudentLife/Office/Pages/default.aspx>.

## **Counseling and Career Services**

A staff of professional counselors is available to students to help them develop life and career goals. Various interest inventories and other career planning instruments, are available in Counseling and Career Services to assist individuals and groups in the career planning process.

Personal issues and concerns can sometimes impede students' progress toward meeting their goals. Counselors are available to discuss these concerns and will make referrals to community providers when appropriate.

The counselors also assist students in such academically related areas as academic probation/suspension, change of academic major, academic fresh start and major or program selection. Online workshops are available for students including topics on

test taking, study skills, time management, stress reduction, values clarification, career planning and test-anxiety management.

Interested individuals should make appointments in advance to see a counselor. For more information about the services offered by Counseling and Career Services, visit [MIDLANDSTECH.EDU/student-resources/counseling-and-career-services](https://www.midlandstech.edu/student-resources/counseling-and-career-services).

## **Services to Students with Disabilities**

Midlands Technical College works to make sure its programs, services, and activities are accessible to all otherwise qualified students, in accordance with the Rehabilitation Act of 1973 and the Americans with Disabilities Act as Amended (ADAAA). At Midlands Technical College, the Disability Services Office operates within the Counseling and Career Services Office. Disability Services offices are located on both the Airport and Beltline Campuses. Disability Services works with faculty and staff of the college to provide equal access to the college's educational programs, services, and courses on a case by case basis. Services include accommodations, auxiliary aids and services, assistive technology, academic and career planning, faculty/staff/student liaisons, and other supportive services for students.

It is a student's responsibility to self-disclose as a student with a disability and to request accommodations through Disability Services. Services are available to students who have disabilities including, but not limited to, visual and hearing impairments, learning disabilities, physical disabilities, chronic medical conditions, Attention Deficit/Hyperactivity Disorder, head and spinal cord injuries, and psychological disabilities.

A student's initial request for accommodations should occur prior to the beginning of a program or course, but can be requested at any time. Accommodations are not retroactive. The Disability Services staff works diligently to complete the intake process within a reasonable amount of time, pending the student's participation in required processes.

The request for accommodations is an interactive process that occurs between the student and the staff of Disability Services. Each student's request is evaluated on an individualized basis. To request accommodations, the student must:

1. Complete and submit the Disability Services Intake Form
2. Submit documentation of disability
3. Complete a Disability Services Initial Interview with a Disability Services Coordinator. The interview is an opportunity for the student and the Disability Services Coordinator to discuss the student's history, barriers, and how those barriers impact academics, and potential accommodations to eliminate those barriers.

The Disability Services Intake Form and Standard Documentation form can be located on the Disability Services website (<https://www.midlandstech.edu/student-resources/disability-services>) or picked up in person at the Counseling and Career Services Offices on Airport or Beltline Campus. Additional documentation guidelines are available on the website as well. Documentation should be completed by a qualified professional and reflect diagnosis, limitations related to disability, and suggested/history of accommodations.

Once this process is complete, the staff of Disability Services will either approve or deny accommodations. If a student is approved, he or she will then complete the Disability Services Orientation with a Disability Services Coordinator which includes

information about how to use his or her specific accommodations, policies and procedures, rights and responsibilities of the student and the college, and the Faculty Notification Process.

If a student would like to appeal the decision made by the staff of Disability Services, he or she may do so by completing the standard Disability Services Appeals Process.

For assistance, contact Disability Services on either Airport Campus (803.822.3505) or Beltline Campus (803.738.7636). Accommodation requests needed for placement testing should also be made through Disability Services and are coordinated with the Student Assessment Office once documentation has been received and reviewed by the Disability Services staff.

## **Educational Opportunity Center**

Educational Opportunity Center (EOC), a federally funded TRIO program of the U.S. Department of Education, provides counseling and information to qualified individuals who want to begin or continue their secondary/post-secondary education. EOC provides in-depth financial aid information and assistance completing the Free Application for Federal Student Aid (FAFSA) and college applications.

Eligible participants must be 19 years of age or older, be a first-generation college student, and have a limited income as determined by the U.S. Department of Education. In addition, individuals under the age of 19 enrolled in an adult education or an alternative education program may be eligible to receive EOC services. EOC services are offered at local agencies in Fairfield and Lexington counties. For more information, please call (803) 822-3749 or 1-800-922-8038 for those outside the calling area. Visit the EOC website at <https://www.midlandstech.edu/student-resources/student-support/educational-opportunity-center>.

## **Educational Talent Search**

Educational Talent Search (ETS) is a federally funded TRIO program of the US Department of Education designed to assist middle and high school students to reach their academic potential and to enroll in post-secondary education. Services include career counseling, college major selection, college admissions information, tutoring, college and university site visits, and financial aid application assistance. Most participants are enrolled at selected schools in Lexington and Fairfield counties.

The program assists individuals who meet federal income guidelines and those who are the first in their families to go to college. Participants receive assistance in applying to any college, university, or other qualified institution of post-secondary education; they need not attend Midlands Technical College. For more information, or to request an application for the Educational Talent Search program, please call 803.822.3628 or visit the ETS website at <https://www.midlandstech.edu/student-resources/student-support/educational-talent-search>.

## **Email**

All Midlands Technical College students are assigned an email account upon application to the college. The student email account is the official form of notification regarding important college information such as registration notices, course cancellations, financial aid transactions, debt and financial information, academic probation/suspension notices, student code and grievance notices, communications from faculty,

and other important information. Students are responsible for checking their college email account on a daily basis and for maintaining the account. It is the responsibility of each student opting to have their email forwarded to an external account to verify this process is set up correctly to ensure all college emails are sent to the external account designated by the student.

Students who do not have a personal computer or Internet access at home may use computers in the Library or Academic Success Centers.

## **Employment Services for Students**

Student Employment Services (SES) is available to all students and alumni of Midlands Technical College. Numerous employment opportunities are listed on the SES website daily. In addition, many positions are easily accessible through job boards, company sites, and search engines. These resources and others can be found at <https://www.midlandstech.edu/student-resources/student-employment-services>.

Student Employment Services staff provide resume critiques, teach interviewing skills and help equip students with job search tools necessary to explore career paths and succeed in today's job market.

Additional Resources include:

- > Cooperative Education/Internship Opportunities
- > Special Events (Career Days/Specialized Career Expos, Employer Site Visits)
- > Online Workshops/Videos
- > Job Search Guide/E-books/Career Resource Library
- > Barriers to Employment
- > Disability Issues/Veterans
- > Social Media/News Flash (Website Alerts of Major Recruiting Events)

These services can assist students in their efforts to define employment objectives, explore labor-market trends and research employers to determine compatibility. For more information, students should contact Student Employment Services or check out the SES website at <https://www.midlandstech.edu/student-resources/student-employment-services>.

### **Cooperative Education**

Cooperative Education is an integration of academic study and career-related work experience. It allows the student an opportunity to test career choices, gain work experience and even earn money as part of a college degree. Cooperative educational experiences are available in approved degree programs. Curriculum credit students must meet departmental criteria and enroll in a cooperative work experience course. For more information, students should contact Student Employment Services, or visit the Student Employment Services website at <https://www.midlandstech.edu/student-resources/student-employment-services>.

### **Internships**

An internship is a partnership between the student and a local employer that benefits both parties. The student can gain real world experience in their field of study while utilizing classroom knowledge. The employer can supplement their workforce with good employees and evaluate potential full-time hires at the same time. All internships

should be paid and provide meaningful work experiences. Local employers often list internships with the college. SES has developed many tools to assist students in their search for internships. These include internship search engines, listings of companies with internship programs and tips for success. For more information, contact Student Employment Services at <https://www.midlandstech.edu/student-resources/student-employment-services>.

## **Student Financial Services**

### **Mission**

The staff of the Student Financial Services Office at Midlands Technical College is committed to providing high-quality service to students, the college and the community. Staff members are dedicated to assisting students with their educational financial needs and serving the community in which the college is located.

### **Financial Assistance at MTC**

Financial assistance at MTC is designed to help students and their families bridge the gap between their own resources and the cost of obtaining a high-quality education. Financial assistance is provided by federal and state governments, the MTC Foundation and private scholarships.

All correspondence from Student Financial Services will be sent to students through their official college email accounts. It is the responsibility of each student to check his or her email account regularly for important information impacting their financial aid awards.

### **Applying for Financial Assistance**

The first step in applying for financial assistance is completing the Free Application for Federal Student Aid (FAFSA). Students should complete the FAFSA online at [fafsa.gov](https://fafsa.gov). Additional information is available on the Student Financial Services website at [MIDLANDSTECH.EDU/financial-aid-and-tuition](https://MIDLANDSTECH.EDU/financial-aid-and-tuition).

The FAFSA provides important information necessary to determine a student's eligibility status, award amount and the Expected Family Contribution (EFC). The EFC is the dollar amount that the student and/or the student's family are expected to contribute towards paying for the student's education, based on federal methodology. The amount of need-based financial aid a student can receive is the difference between the Cost of Attendance (COA) minus the EFC and any other source of aid such as scholarships.

$\text{Cost of Attendance (COA)} - (\text{EFC and other aid}) = \text{Financial Need}$

The cost of attendance for MTC can be found on the Student Financial Services website at [MIDLANDSTECH.EDU/financial-aid-and-tuition/student-cost-estimates](https://MIDLANDSTECH.EDU/financial-aid-and-tuition/student-cost-estimates). The cost of attendance includes tuition, fees, books, supplies, room, board, transportation and personal expenses as determined by the Office of Student Financial Services. Individual student costs depend on factors such as residency, enrollment status, housing arrangements and program of study.

Because some financial aid funds are limited, it is not always possible to meet a student's full financial need. Therefore, all students are encouraged to apply early each year to make sure they are awarded the best possible financial aid package they are eligible to receive. The priority processing deadline for completed applications for the fall semester is April 15 each year and November 15 for the spring semester. Check the

Student Financial Services website for more information regarding priority processing deadlines.

No financial aid award can be made until the college's financial aid application process is completed. A completed application is defined as one that has been received, reviewed, found free from errors and does not require additional verification information.

When completing the FAFSA, students should use the MTC school code 003993. Applicants should save all records and other materials used in applying for aid, including income tax documents. These documents may be needed later if the applicant is selected for a process called "verification."

### **Financial Aid Awards**

Once the file is complete, the applicant will be notified by email regarding his or her financial aid award status. Students may also check their award status online, at [mymtc.MIDLANDSTECH.EDU](http://mymtc.MIDLANDSTECH.EDU). The award notification will list the type(s) and estimated amount(s) of assistance the student is eligible for based on enrollment information at the time of the award. All financial aid awards are subject to change if the information upon which they were based changes or federal or state regulations require a change. Awards will be based on the cost to attend MTC and the results of the FAFSA. Students should become familiar with the terms and conditions Information, which is available online at <https://www.midlandstech.edu/financial-aid-and-tuition/how-apply-financial-aid/financial-aid-terms-and-conditions>. Students should check the Student Financial Services website frequently for important information such as application deadlines. They should also check [MyMTC.MIDLANDSTECH.EDU](http://MyMTC.MIDLANDSTECH.EDU) to review their award status and balance due prior to the fee payment deadline to ensure classes are not dropped for non-payment.

### **Title IV Repayment**

If a student completely withdraws or is administratively withdrawn from all courses prior to completing 60 percent of the semester, the total federal aid disbursed (excluding Federal Work-Study earnings) will be subject to a return of Title IV funds calculation as specified in Section 484B of the Higher Education Act. Based on this calculation, the student may be required to repay to the institution and/or the Department of Education a portion of the funds received. Students completely withdrawing but who plan to attend a future shorter session within the same semester should notify the Office of Student Financial Services in writing. Failure to repay this debt will result in a loss of financial aid eligibility. Students with an unpaid debt to the institution will not be allowed to register until the debt has been satisfactorily resolved.

### **Financial Aid Disbursements**

Aid listed on the award notice, with certain exceptions such as Federal Work-Study, will be credited to the student's account. Credit balance refunds will be issued for any remaining funds after tuition, fees, bookstore charges and any other authorized charges are deducted from the student's award. Students should check the Student Financial Services website for disbursement dates. Credit balance refunds will be issued to students at the student's selected refund preference. It is the student's responsibility to ensure mailing address accuracy with the Student Records Office and to make a refund selection preference at [RefundSelection.com](http://RefundSelection.com).

## Financial Aid Programs

### Federal Pell Grants

Undergraduate students who have not received a bachelor's or professional degree may be considered for the Federal Pell Grant program. Students are limited to the equivalent of 12 semesters (or 600%) of Pell Grant eligibility during their lifetime. The amount of the grant received depends on the student's Expected Family Contribution (EFC) as determined by the U.S. Department of Education through the Free Application for Federal Student Aid (FAFSA) and the student's enrollment status. A FAFSA must be completed for each new academic year.

### Federal Supplemental Educational Opportunity Grants

Federal Supplemental Educational Opportunity Grants (FSEOG) are available to students who have not completed a bachelor's or professional degree. FSEOGs are awarded to exceptionally needy students. Priority is given to students with the lowest EFC and to students who receive the Federal Pell Grant. An FSEOG is a federal grant and does not have to be repaid. There is no guarantee every eligible student will receive an FSEOG award. Funding for this program is limited.

### Federal Work-Study

The Federal Work-Study (FWS) program provides part-time employment for students to help meet their educational expenses. The program encourages community service work and work related to a student's course of study. Students who are currently enrolled in a degree-seeking program or eligible certificate or diploma program may work an average of 15 to 20 hours per week. The number of hours assigned per week to a student is based on the amount of the total FWS award, the student's class schedule and the student's academic progress. FWS positions may be on or off campus.

The total Federal Work-Study award depends on the time of application, the level of financial need and the availability of funds. Students will be paid by the hour. Hourly rates vary according to the position held. Federal Work-Study earnings are deposited once a month to the student's preferred bank account.

### Federal Direct Loans

*Direct Loans* – Direct loans are the Federal government's major form of self-help aid. These loans are available through the William D. Ford Federal Direct Loan program. Direct loans can be either subsidized or unsubsidized. Please reference the Student Financial Services web page for information regarding student loan limits and application procedures.

A **Subsidized** Loan is awarded on the basis of financial need. No interest accrues and no payments are required during an eligible period of deferment. The federal government "subsidizes" the loan during these periods by paying the interest for the student.

**Unsubsidized** Direct Loans accrue interest from the time the loan is disbursed until it is paid in full.

*Direct Parent Loans for Undergraduate Students (PLUS) provides loans to parents for the purpose of paying the educational expenses of their dependent student.*

### LIFE Scholarship

LIFE Scholarships are merit-based South Carolina awards recognizing high school and college academic performance. Students who are SC residents and graduate from a

South Carolina high school with a 3.0 GPA on a 4.0 standard scale may be eligible for a LIFE Scholarship provided the student enrolls in at least 12.0 credit hours of college-level work in courses at the 101-level or higher. To be LIFE eligible as a continuing college student, the student must earn a minimum of 30 semester hours in college coursework at the 101 course-level or higher per year and maintain a 3.0 GPA. An eligible student may receive a LIFE Scholarship for up to two academic years (four semesters) for an associate degree program and one academic year (two semesters) for a diploma or certificate program.

Transfer students must have earned a minimum 3.0 LIFE GPA on a 4.0 grading scale to receive the LIFE scholarship at MTC. Coursework from all institutions attended is considered in calculating the LIFE GPA. Please visit [MIDLANDSTECH.EDU/financial-aid-and-tuition](http://MIDLANDSTECH.EDU/financial-aid-and-tuition) for more information.

### **Lottery Tuition Assistance**

Information on the S.C. Education Lottery Act is provided on the S.C. Technical College System's website: [sctechsystem.com](http://sctechsystem.com).

Award amounts depend on the proceeds generated by the Lottery and the final laws, rules and regulations issued by appropriate state and college officials. Please visit the MTC website for updated information at [MIDLANDSTECH.EDU/financial-aid-and-tuition](http://MIDLANDSTECH.EDU/financial-aid-and-tuition).

Lottery-funded tuition assistance is not based on financial need. Any South Carolina student who qualifies for in-state tuition rates at a public two-year college may be eligible to receive Lottery Tuition Assistance if the student's tuition costs are not paid by federal or other state aid.

### **South Carolina Need-Based Grants**

South Carolina Need-Based Grants (SCNBG) are available to a limited number of students with high financial need, as determined by the student's EFC. Students must be South Carolina residents to qualify. Funding for this program is limited.

### **MTC Scholarships**

MTC academic scholarships are awarded each year to both entering and continuing students. The application deadline is early April each year for the upcoming fall/spring term.

The criteria for scholarships vary, but may include academic achievement, community participation and financial need. The application and eligibility information are available on the Student Financial Services website.

### **Other Scholarships Assistance**

Students can find a variety of college scholarship resources on the Student Financial Services website ([MIDLANDSTECH.EDU/financial-aid-and-tuition](http://MIDLANDSTECH.EDU/financial-aid-and-tuition)).

## **Financial Aid – Satisfactory Academic Progress**

### **I. Introduction**

All students receiving federal and state student financial aid must adhere to the college's Student Financial Services Office policy on standards of Satisfactory Academic Progress (SAP). The intent of this policy is to ensure that students who are receiving federal and/or state financial aid are making measurable progress toward completion of a degree or certificate program in a reasonable period of time.

## II. Scope

This policy applies to those students applying for or receiving federal and/or state funds. To reasonably measure a student's satisfactory academic progress toward completion of the degree, certificate or diploma in which the student is enrolled. The student's total academic record will be evaluated. This includes all academic work attempted at MTC and any transfer hours from other schools attended that are accepted at MTC. As recipients of federal or state financial assistance, students have certain rights and responsibilities. Students' failure to fulfill their responsibilities to make satisfactory academic progress as described may result in the cancellation of their awards, and any funds already received may have to be repaid.

## III. Monitoring Procedures

At the end of each semester, the Student Financial Services office will monitor satisfactory academic progress for all students receiving federal or state financial aid to ensure that they are making satisfactory progress toward program completion. The standards defining satisfactory progress are outlined below.

To meet satisfactory academic progress, students must successfully complete at least sixty-seven (67) percent of the credit hours they attempt and maintain a cumulative GPA of 2.0.

*Warning Status:* Students who do not satisfactorily complete at least sixty-seven (67) percent of attempted hours will be placed on warning status. Students who have not attained 67 percent satisfactory completion by the next semester of enrollment following the warning period will no longer be eligible for federal or state assistance.

*Fresh Start:* Be advised that federal regulations require that all courses attempted must be included in evaluating a student's satisfactory academic progress for financial aid purposes.

*Course Withdrawals, Incompletes, Repetitions, Remedial or Developmental:* Students who receive federal or state financial aid must be aware that repeated courses, non-credit remedial courses and grades of W, WF, I and NC will be considered in assessing progress toward completion.

*Administrative or Medical Withdrawals:* Students who receive federal or state financial aid must be aware that courses with administrative or medical withdrawals will be considered in assessing progress toward completion.

*Developmental Studies and Remedial Coursework Standards of Progress:* Financial aid recipients may take a maximum of 30 credit hours in Developmental Studies (DVS) and remedial course work.

*Transfer Students:* All transfer students will be evaluated to determine if they are making satisfactory academic progress prior to being packaged for financial assistance. The evaluation process is based on all hours attempted at MTC and all transfer hours accepted by MTC.

*Change of Major(s):* Students who change their majors are still responsible for maintaining satisfactory academic progress in accordance with the procedure as outlined. A review of satisfactory academic progress will be based on the student's current program of study at the end of each term enrolled. If the student has changed majors prior to the end of the semester, eligibility will be assessed against the new program of study.

.A student changing from an associate program into a diploma or certificate program of study may lose federal and state eligibility immediately upon making the change if the attempted hours are equal to or in excess of 150 percent of the hours required for the certificate or diploma program.

#### **IV. Standards**

##### *Length of Eligibility*

The Office of Student Financial Services monitors the satisfactory academic progress of all students receiving federal and state aid. Financial aid recipients are eligible for assistance until they have attempted up to one and a half (150 percent) times the number of semester hours required for the program of study currently enrolled in. Financial assistance will be limited to a maximum of 180 hours attempted.

##### *Cumulative Grade Point Average*

Students who fail to earn the required cumulative college GPA of 2.0 will be placed on warning during the next semester they enroll in the college. Students in all programs of study who are placed on probation will be reviewed at the end of the semester. Students who fail to attain a cumulative GPA of 2.0 or greater will lose federal and state aid eligibility. Developmental coursework grades will not be calculated in the cumulative GPA requirement.

#### **V. Notification**

Following a review, a student who has failed to meet satisfactory academic progress will be notified by email of the resulting ineligibility for federal or state funds. Future awards will be canceled upon becoming ineligible. To receive consideration for reinstatement of federal or state assistance, a student will need to submit a Satisfactory Academic Progress (SAP) Appeal form to the Office of Student Financial Services.

#### **VI. Re-Establishing Eligibility for Financial Aid**

Students will be reinstated for financial aid eligibility when they have successfully completed 67 percent of attempted hours, have a 2.0 cumulative grade point average, and are still under their maximum time frame period for degree completion as set forth in this policy.

#### **VII. Appeal of Financial Aid Ineligibility**

A. An ineligible student may appeal by submitting a Satisfactory Academic Progress Appeal form to the Student Financial Services Office indicating reasons why minimum academic standards were not achieved and what actions have been taken or what changes have occurred to resolve the problem. Each appeal will be considered on its own merit. Individual cases will not be considered as precedent. Examples of extenuating circumstances may include but are not limited to the following:

- > Death in the student's immediate family that has been documented.
- > Personal illness requiring a loss of the equivalent of more than five consecutive class days that can be supported by a letter from a physician.
- > Serious illness in the student's immediate family that can be supported by a letter of documentation from the family member's attending physician.

- > Change in job schedule/responsibilities required by the employer and documented by the employer.
  - > Circumstances regarding approval of Academic Fresh Start, if applicable.
- B. The appeal of financial aid will be reviewed and a determination made. The student will be advised in writing of the decision by email to the student's official college email account.
- C. If the appeal is approved, the student will be assigned an academic improvement plan with which they must comply. Students must continue to meet the terms of this plan each semester until they have achieved a cumulative 2.0 GPA and a 67% completion rate. Students in violation of the 150% rule must continue to meet the terms of their academic improvement plan to receive financial assistance at the college. Should the student fail to comply with their academic improve plan, the student's future awards will be cancelled.
- D. Decisions on appeals are final and cannot be appealed at any other college or federal level.

## **Food Service**

Fast food service is available in MTC cafés located on the Airport and Beltline campuses. Vending machine service is also available in buildings throughout the college on all campuses.

## **Health Services**

Midlands Technical College provides health awareness and wellness activities for students, faculty and staff. As a nonresidential college, Midlands Technical College expects students will normally secure medical services through a private physician or medical facility. It is the policy of the college, however, to provide all students with accidental injury and accidental death and dismemberment insurance while participating in college-sponsored activities (see Student Insurance). Any student requiring immediate medical treatment while on an MTC Campus should contact the Security Office on any campus or dial 911. Medical claims related to a college activity must be submitted to the office of the Vice President for Student Development Services for processing.

## **Housing**

Midlands Technical College is a nonresidential institution and does not maintain residential facilities. Therefore, students are expected to provide their own off-campus housing. As a service to the student body, the Student Life Center keeps flyers for nearby apartment complexes on display in the Student Commons Areas (ASC 126 and BSC 201) and invites a variety of apartment complexes to participate in vendor fairs at the beginning of each fall semester.

In addition, students can view on-campus bulletin boards for roommate inquiries or other off-campus housing options at <https://mymtc1.MIDLANDSTECH.EDU/StudentLife/Office/Pages/default.aspx>.

## Job Location and Development

The Job Location and Development (JLD) program assists students in locating part-time and summer employment. Attempts are made to provide program-related employment opportunities whenever possible. Jobs obtained through JLD allow students an opportunity to gain valuable work experience and future employment contacts. All students enrolled in the college, regardless of their financial needs, are eligible to participate. This program is designed to help students with educational expenses. A complete listing of jobs can be found on the Student Employment Services section on the college's website under Student Resources.

## Academic Success Center

The Airport, Beltline, Batesburg-Leesville, Harbison, and Northeast campuses have Academic Success Centers open to all Midlands Technical College students. The use of computers and tutoring in the centers is free to all enrolled students, and includes the following resources:

### Computer Access:

All students have access to computer resources for the purposes of academic computing. The availability of software packages is determined by the courses taught at the college and by those programs supported by the college. Available resources include various productivity and development software in both microcomputer and mainframe environments, email, the Internet, Microsoft Office products, and a wide variety of interactive educational software. Since available resources differ by campus, it is a good idea to call ahead to be sure the software needed is available at that location - Airport 822.3545, Beltline 738.7871, Batesburg-Leesville 604.1639, Harbison 407.5005, or Northeast 691.3900.

### Tutoring Services:

Tutoring is available to assist students in selected courses, usually general education courses or introductory courses in a program of study. Mathematics, writing, and reading are the major areas for tutoring, but tutoring is also offered for foreign languages and selected computer, accounting, and science courses.

### Additional Resources:

In addition to computer access and tutoring, the Academic Success Center provides a variety of supplemental materials to assist students in becoming independent learners. These materials include video tapes, CDs, DVDs, science models and microscopes with slides.

## Library

The library provides a wide range of information services to assist students, faculty and staff with study and research. The library is also open to the public.

The library collection totals more than 452,000 print and electronic volumes that support the curriculum of the college, including business, medical, legal, scientific, technical, humanities and reference publications. The library subscribes to over 450 journals and provides access to numerous full text journals through its electronic databases. The library web page offers access to the online catalog, databases and other library resources.

Information technologies of all types complement the library's print collection, including online databases and wireless Internet access.

Introductory and advanced library instruction, assistance to distance learners, and interlibrary loan are available to students, faculty and staff.

## **Student Life**

### **Clubs and Organizations**

There are many clubs and organizations active on campus. Through participation in these clubs and organizations, students may explore and extend their interests and further develop their skills and abilities by working with fellow students. Membership is open to all students who meet the qualifications of the respective club. This information is available in the Student Life office or online at: <https://mymtc1.MIDLANDSTECH.EDU/StudentLife/Clubs/Pages/default.aspx>.

Information on procedures for chartering a new student organization is also available.

### **Honor and Leadership Organizations**

Student honor and leadership organizations include the Midlands Technical College Ambassador Assembly, Alpha Eta Kappa chapter of the Phi Theta Kappa Society, the National Technical Honor Society, and the National Society of Leadership and Success. The Ambassador Assembly is an honor/volunteer organization of outstanding students selected to represent Midlands Technical College at college and community events. Phi Theta Kappa is an international honor society for community colleges. The National Technical Honor Society recognizes outstanding students enrolled in Career Programs majors. The National Society of Leadership and Success is a national leadership development organization chartered on two and four year college campuses. A defined leadership development program must be completed for induction in the Midlands Technical College chapter.

### **Cultural and Co-curricular Programming**

A major goal of the Student Life Office is to augment students' academic experience through co-curricular programming. Lectures, seminars and workshops on a variety of subjects are offered as well as performances by local artists, films and special interest programs.

### **Identification Cards**

In support of campus safety and security, all enrolled students are required to maintain and carry a current MTC ID card and show it upon request. ID cards are required to access some college services. Student ID cards may also be used for off-campus benefits. After paying for classes, students should arrange to receive a student ID card. To receive ID cards, students should bring their paid fee receipt for tuition or registration statement reflecting a zero balance and a picture ID. The initial ID card is free for degree seeking students. ID cards are required for specific CCE programs; these students must pay a \$5 fee to receive an ID card. Replacement cards are also \$5. Only cash payments are accepted at this time. Student ID Cards are processed according to the following schedule:

- > Airport Campus Student Center Commons, Room 126, 803.822.3650  
Wednesdays, 9 a.m. - 1 p.m.; Thursdays, 1-5:30 p.m.
- > Beltline Campus Student Center, Room 121, 803.738.7860  
Wednesdays, 9 a.m. - 1 p.m.; Thursdays, 1-5:30 p.m.

IDs are not processed during Late Registration, Priority Drop/Add, Schedule Change or when academic credit classes are not in session.

### **Publications**

The Student Life Office publications include an online *Student Handbook* and the *Student Clubs and Organization Guidelines Manual*. These publications can be found at: <https://mymtc1.midlandstech.edu/StudentLife/Office/Pages/default.aspx>.

### **Social and Sports Activities**

The Student Life Office seeks to foster interaction among the entire student body, faculty and staff by offering social and recreational activities. This interaction can increase the opportunities for success in college.

### **Student Advisory Board**

Students have the opportunity to participate in student government through the Student Advisory Board (SAB). This governing board provides students a voice in college governance, campus concerns and student affairs. The Student Advisory Board is also the umbrella structure for all MTC student clubs and organizations. Representatives of each student organization sit on the SAB as voting members. Any student may attend Advisory Board meetings and voice concerns as a nonvoting member. The Student Advisory Board charters new student organizations, sponsors community service projects and supports Student Life programming. The Student Advisory Board President attends the MTC Commission meetings and serves as an advisor on student issues to the Vice President for Student Development Services. The Student Advisory Board also appoints students to college standing and ad hoc committees.

All Midlands Technical College students are automatically members-at-large of the SAB and are encouraged to participate. The executive officers are elected in the spring. Contact the Student Life Office on either the Beltline or Airport campus for further information.

## **Student Insurance**

Student accident insurance covers all credit and non-credit students on the college's campuses while the college is in session and during activities sponsored and supervised by the college, including intramural athletics. Benefits provided under the accident insurance cover medical claims submitted within 30 days of the date of the accident. Medical claim forms are available in the Security Office and the office of the Vice President for Student Development Services. Claim forms should be submitted to the office of the Vice President for Student Development Services for processing. A completed claim form must be submitted within 90 days after covered loss occurs or as soon as reasonably possible.

Group student health insurance is not provided directly by Midlands Technical College. As a non-residential college, MTC expects students to secure medical services through a private physician or medical facility as needed. For more Health Insurance Information students can visit the HealthCare.gov website.

## **Student Records Office**

Personnel in the Student Records Office assist currently and previously enrolled students in the following ways:

*Academic Honors* – At the end of each term, Student Records will identify students eligible for the President’s List, Scholars’ List and Part-time Honor Roll.

*Confidentiality of Records* – The Student Records Office is the office authorized to release student information. This office adheres to the Family Educational Rights and Privacy Act (FERPA) regarding release of student information. Students who do not want directory information to be released should contact the Student Records Office and complete a form for non-release of directory information. See Release of Student Information.

*Drop/Add/Withdrawal* – Students must complete a Drop/Add/Withdrawal form to allow the Student Records Office to change class schedules or withdraw students from classes. Web-enabled students may make their own changes online during the published schedule change period for the term attending.

*Enrollment Certifications* – Students desiring to have their enrollment certified for previous loans, Department of Social Services requirements or other purposes can have this done at the Student Records Office.

*GPA Recalculations for Repeated Courses* – Students who repeat 100- or 200-level courses will have the lower grade removed automatically from GPA calculations if both courses have the same course prefix and number. If the repeated course was first taken under a different course prefix and/or course number, the GPA may be manually recalculated if the course is equivalent. In this case, the student must complete a repeat course request with the Student Records Office. Both courses and grades will remain on the transcript, but the original course grade will no longer be calculated into the GPA at Midlands Technical College. Students planning to transfer should be aware that other institutions may recalculate their GPAs using all courses completed.

*Graduation* – Students planning to graduate should obtain a graduation application from the Student Records Office and submit the completed form according to the due dates listed in the college calendar.

*MTC Transcripts* – MTC transcripts are ordered online through the National Student Clearinghouse. The Clearinghouse provides online ordering 24/7. In addition to the convenience of credit card payment, this service provides email notifications as orders are received and processed. Students are assessed a fee of \$7.25 for the processing and mailing. Students who need help or have questions about the service should contact the National Student Clearinghouse via email at [transcripts@studentclearinghouse.org](mailto:transcripts@studentclearinghouse.org) or by phone at (703) 742-7791 (Mon-Fri, 9 a.m.-7 p.m., Eastern Standard Time-EST).

*Address Changes* – Currently enrolled students may change their address online through their MyMTC Account. Address accuracy is essential for student receipt of registration information and other college information, including refund checks. Mail returned to the college may result in a registration hold being placed on the student’s record until the corrected address information is received by the Student Records Office. Address changes do not constitute a change in residency. Requests for residency changes for tuition purposes are made through the Admissions Office.

*Name Changes* – Official name changes are made through the Student Records Office. To change a student name, one of the following valid legal documents should be attached to the form: birth certificate, court decree, marriage license (to change last name only) or military identification card.

*Probation/ Warning/Suspension* – The Student Records Office notifies students placed on academic probation, warning or suspension. These communications are sent at the end of each full semester, rather than at the end of each mini semester.

*Routing a Previous College's Transcripts* – The Admissions Office will route official previous college transcripts to the Student Records Office for official evaluation. Official transcripts are transcripts sent directly from one college to another. Electronic transcript formats are preferred but not required. Students are encouraged to request previous colleges to send official transcripts electronically whenever possible to expedite transcript evaluation. Unofficial transcripts are used only for admission purposes and are not routed to the Student Records Office for evaluation. Approved and non-approved credit is available for viewing at the student's MyMTC account.

*Verification of Grades/GPA* – Students needing to verify grades/GPA for auto insurance, company reimbursement of tuition and other purposes should contact the Student Records Office.

## **Student Support Services (Federal TRIO Program)**

TRIO Student Support Services (SSS) is an academic resource for Midlands Technical College students enrolled in an associate degree and/or diploma/certificate programs. Eligible applicants must be first generation college students (neither parent has a four-year degree) as well as meet other requirements set by the US Department of Education income levels.

Funded 100% by the US Department of Education, the TRIO Student Support Services offices have two locations: Airport Student Center 201 (Airport Campus) and Wade Martin 236 (Beltline Campus). Services include academic advisement; academic mentoring; transfer planning; financial aid planning; dedicated student computer usage with no-cost printing for class materials; and other services designed to help its participants achieve their academic and career goals, especially the goal of transferring to a 4-year college. For more information, call (803) 822-3032 or visit the TRIO Student Support Services (SSS) page at <https://www.midlandstech.edu/student-resources/student-support/trio-student-support-services>. Students interested in learning if they qualify for this exceptional, academic grant program should pick up an SSS program application or complete one online to email. The earlier MTC students start the SSS application process, the earlier SSS can help students to complete their educational plan.

## **Upward Bound**

The Upward Bound (UB) program assists low-income potential, first-generation college students in preparing for higher education by providing instruction in literature, composition, math, science and foreign language on college campuses. This instruction is offered on Saturdays and during the summer.

The program provides services for target high schools in Fairfield and Lexington counties. For more information, please call 803.822.3384 or visit the UB website at <https://www.midlandstech.edu/student-resources/student-support/upward-bound>.

## **Veterans Assistance**

Midlands Technical College is approved for veterans' educational assistance and maintains a full-time VA Office to assist veterans already enrolled and those seeking

admission. All students eligible for veteran educational benefits should visit the VA office on Airport or Beltline Campus upon registration each term.

For more detailed information on the Veterans Educational Assistance program, students should consult the Student Handbook or contact the VA Office on the Beltline or Airport campuses.

# Corporate and Continuing Education



## Training Programs

Midlands Technical College's Corporate and Continuing Education (or Training) programs promote and support individual, community, and economic development.

Program offerings include online and on-ground certificates, short courses, conferences, and apprenticeships. You can advance your career, start a new one, or simply do something good for yourself.

Training programs can be completed quickly (in a matter of weeks or months), and no college application is needed. These programs are not eligible for federal financial aid, but they may qualify for other scholarships and grant funds.

The programs and courses described in the other sections of this catalog are MTC's Academic programs. Academic programs provide college credit, transfer to four-year colleges and universities, and are eligible for federal financial aid (FAFSA).

Search for programs at [MIDLANDSTECH.EDU/schools](http://MIDLANDSTECH.EDU/schools), or call us at 803.732.0432 to get started.

## Other Areas of Focus

### **Business Solutions (Corporate)**

MTC's Business Solutions team works to connect business customers to the best corporate training and consulting resources available. Whether you are looking to enhance

the skills of one employee or revamp your entire workforce, we can help you identify and implement the right solution to help you meet your organizational goals.

### **QuickJobs**

QuickJobs programs can help prepare you for lucrative jobs, quickly. QuickJobs are career training programs developed for jobs where workers will be in high demand over the next decade. QuickJobs are designed to provide intensive and complete job training; prior experience in a field is not required. Most programs only take a few months to complete, and some can be finished in a matter of weeks. Learn more at [MIDLANDSTECH.EDU/QuickJobs](http://MIDLANDSTECH.EDU/QuickJobs).

# SCHOOLS



**Advanced Manufacturing and Skilled Trades**

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**Business**

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**Education and Public Service**

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**English and Humanities**

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**Health Care**

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**Interdisciplinary Studies**

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**Science, Information Technology,  
Engineering, and Math (STEM)**

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**Social and Behavioral Sciences**

# School of Advanced Manufacturing and Skilled Trades



The School of Advanced Manufacturing and Skilled Trades offers programs that are designed to prepare students for careers in areas such as:

- > Automotive Technology as a Service Technician, Generator Repair Technician, Shop Foreman, Service Advisor, Heavy Equipment Technician, Heavy Duty Vehicle Technician, or Automotive Technology Instructor for high school, college or industry
- > Building Construction as a Field Superintendent, Field Project Management, Contractor, or Specialty Subcontractor
- > Commercial Graphics Communication as a Graphic Design Technician, Digital Assembly Technician, Print Technician, or Graphics Sale Representative
- > Heating, Ventilation, and Air Conditioning as a Residential or Commercial HVAC Service Technician, HVAC/R Installation Technician, Apartment Maintenance or Physical Plant Maintenance Technician, Appliance Repair Technician, or Commercial Refrigeration Technician
- > Industrial Electricity/Electronics as an electrical installer, electrician, or electrical technician.
- > Machine Tool as a machinist, CNC Operator, Set Up Operator or Programmer, Quality Inspector, or Machine Tools Sales Representative
- > Mechatronics as an Automation Operator, Maintenance Tech, Assembly and Build tech, Mechatronics Design Tech
- > Welding as a Pipe Welder, Fabricator, or Structural Welder

A number of the programs within Advanced Manufacturing and Skilled Trades have developed flexible, short-term certificate programs designed for students who wish to specialize in one area of employment. These certificates also give those in the work force opportunities to upgrade their skills on modern equipment. The introduction of computers into virtually every aspect of business and industry has increased the need for high-technology training opportunities.

## **Associate Degree Programs**

Automotive Technology  
Building Construction Technology  
Commercial Graphic Communications  
General Technology  
Heating, Ventilation, Air  
Conditioning and Refrigeration  
Technology  
Machine Tool Technology  
Mechatronics Technology

## **Certificate Programs**

Automotive (various)  
Basic Electrical Wiring  
Carpentry  
Heating/Ventilation/Air  
Conditioning/Refrigeration Mechanics  
Machining  
Mechatronics Technology I  
Renewable Energy Technician  
Welding Technologies I

## **Diploma Programs**

Air Conditioning/Refrigeration  
Industrial Electricity/Electronics  
Machine Tool

*All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).*

## **AUTOMOTIVE TECHNOLOGY**

Automotive technicians make up the largest service and repair group in the country, and the increasing application of computerized systems in cars and trucks has created a great demand for highly trained professionals.

The Automotive Technology program at Midlands Technical College is designed to provide theory and hands-on training to prepare students to be well-rounded entry-level automotive technicians. Specialization areas emphasize diagnostic and engine performance service, engine overhaul, manual and automatic transmission reconditioning and repair, heat and air conditioning, and all phases of chassis service. Graduates of the Automotive Technology program work in dealerships, independent garages and other related businesses as technicians, parts personnel, services writers and field representatives for manufacturers.

Six separate certificate programs have been developed based on eight ASE (Automotive Service Excellence) categories — engine repair; drive train repair; heating and air conditioning repair; electrical systems repair; brake, suspension and steering repair; and engine performance — to prepare students for the ASE certification exam.

Graduates of this program earn an Associate Degree in Automotive Technology. The six (6) individual certificate programs are also available.

The Automotive Technology Program is Master Certified by NATEF, the National Automotive Technicians Education Foundation. NATEF accreditation validates the quality of the curriculum, facilities and competency of the instructors. NATEF is nationally recognized as the benchmark of automotive education.

**All Automotive Technology courses must be passed with a “C” or better to receive credit towards a degree or certificate.**

### **Special Requirements**

Students are required to purchase their own safety equipment and tools. A tool list for each course is available upon request.

**Newly entering students are required to attend mandatory orientation prior to beginning AUT courses.**

**MAJOR: AUTOMOTIVE TECHNOLOGY (76 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 160	Technical Communications (O, V)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0
PSY 201	General Psychology(O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
CPT 101	Introduction to Computers (O, H, V)	<u>3.0</u>
	Subtotal	15.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

**B. MAJOR COURSE REQUIREMENTS (21 CREDIT HOURS)**

		<u>Credit Hours</u>
AUT 105	Beginning Engine Repair	4.0
AUT 112	Braking Systems	4.0
AUT 115	Manual Drive Train/Axle	3.0
AUT 131	Electrical Systems	3.0
AUT 221	Suspension and Steering Diagnosis	3.0
AUT 241	Automotive Air Conditioning	<u>4.0</u>
	Subtotal	21.0

**C. OTHER HOURS REQUIRED FOR GRADUATION (40 CREDIT HOURS)**

		<u>Credit Hours</u>
AUT 106	Intermediate Engine Repair	4.0
AUT 116	Manual Transmission and Axle	4.0
AUT 132	Automotive Electricity	4.0
AUT 133	Electrical Fundamentals	3.0
AUT 141	Introduction to Heating and Air Conditioning	4.0
AUT 145	Engine Performance	3.0
AUT 151	Automotive Transmission/Transaxle	3.0
AUT 153	Automatic Transmission Diagnosis	3.0
AUT 222	Four-Wheel Alignment	2.0
AUT 245	Advanced Engine Performance	5.0
AUT 262	Advanced Auto Diagnosis and Repair	4.0
COL 101	College Orientation	<u>1.0</u>
	Subtotal	40.0

**Total Credit Hours: 76.0**

## AUTOMOTIVE CERTIFICATES

### **ENGINE REPAIR (8 CREDIT HOURS)**

		<u>Credit Hours</u>
AUT 105	Beginning Engine Repair	4.0
AUT 106	Intermediate Engine Repair	<u>4.0</u>
<b>Total Credit Hours:</b>		8.0

### **DRIVE TRAIN REPAIR (13 CREDIT HOURS)**

		<u>Credit Hours</u>
AUT 115	Manual Drive Train/Axle	3.0
AUT 116	Manual Transmission and Axle	4.0
AUT 151	Automatic Transmission/Transaxle	3.0
AUT 153	Automatic Transmission Diagnosis	<u>3.0</u>
<b>Total Credit Hours:</b>		13.0

### **HEATING AND AIR CONDITIONING REPAIR (8 CREDIT HOURS)**

		<u>Credit Hours</u>
AUT 141	Introduction to Heating and Air Conditioning	4.0
AUT 241	Automotive Air Conditioning	<u>4.0</u>
<b>Total Credit Hours:</b>		8.0

### **ELECTRICAL SYSTEMS REPAIR (10 CREDIT HOURS)**

		<u>Credit Hours</u>
AUT 131	Electrical Systems	3.0
AUT 132	Automotive Electricity	4.0
AUT 133	Electrical Fundamentals	<u>3.0</u>
<b>Total Credit Hours:</b>		10.0

### **BRAKE, SUSPENSION AND STEERING REPAIR (9 CREDIT HOURS)**

		<u>Credit Hours</u>
AUT 112	Braking Systems	4.0
AUT 221	Suspension and Steering Diagnosis	3.0
AUT 222	Four-Wheel Alignment	<u>2.0</u>
<b>Total Credit Hours:</b>		9.0

## ENGINE PERFORMANCE (12 CREDIT HOURS)

		<u>Credit Hours</u>
AUT 145	Engine Performance	3.0
AUT 245	Advanced Engine Performance	5.0
AUT 262	Advanced Auto Diagnosis and Repair	<u>4.0</u>
<b>Total Credit Hours:</b>		12.0

## BUILDING CONSTRUCTION TECHNOLOGY

Building Construction Technology is designed to train the next generation of home-builders, superintendents, job site personnel, building inspectors and contractors for the construction industry of South Carolina. Training is based on a set of detailed skills standards from the nation's leaders in the construction industry. Students are encouraged to become a professional in the construction industry. Students learn to build with a "zero-defect" construction philosophy. This means that a commitment to flawless workmanship and unparalleled quality is at the heart of all training activities. Students will experience training in print reading, layout, frame assembly, door and window installation, estimating, scheduling, and other job site duties. Required cooperative education experiences provide students opportunities to hone their management skills, stay in touch with new technologies and trends, and interact with potential employers.

**All Building Construction Technology courses must be passed with a "C" or better to receive credit towards a degree or certificate.**

**MAJOR: BUILDING CONSTRUCTION TECHNOLOGY  
(62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 160	Technical Communications (O, V)	3.0
SPC 209	Interpersonal Communications	
	OR	
SPC 205	Public Speaking (O, H, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
PSC 215	State & Local Government (O)	3.0
MAT 170	Algebra, Geometry & Trigonometry I (O, V)	3.0
COL 101	Career Exploration	<u>1.0</u>
Subtotal		16.0

### **B. MAJOR COURSE REQUIREMENTS (36 CREDIT HOURS)**

		<u>Credit Hours</u>
BCT 101	Introduction to Building Construction (O, V)	5.0
BCT 102	Fundamentals of Building Construction	4.0
BCT 104	Site Layout and Preparation	2.0

BCT 111	Blueprint Reading and Specifications	3.0
BCT 142	Fundamentals of Construction Safety	4.0
BCT 131	Estimating and Quantity Takeoff	2.0
BCT 132	Introduction to Commercial Estimating	2.0
BCT 209	Construction Project Management	3.0
BCT 212	Construction Methods and Design	3.0
BCT 221	Construction Building Codes	3.0
BCT 223	Residential Mechanical Systems	3.0
WLD 102	Introduction to Welding	<u>2.0</u>
	Subtotal	36.0

### C. ADDITIONAL COURSE REQUIREMENTS (10 CREDIT HOURS)

		<u>Credit Hours</u>
CWE 111	Cooperative Work Experience I	1.0
BUS 101	Introduction to Business (O, V)	3.0
BUS 121	Business Law I (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	10.0
	<b>Total Credit Hours:</b>	62.0

## CARPENTRY CERTIFICATE

The Carpentry Certificate is designed to train the next generation of skilled workers needed in the construction industry. This certificate can provide multiple avenues to enter the construction industry without an associate's degree in building construction technology. Students will experience training in print reading, layout frame assembly, door and windows installation, estimating, scheduling and other job site duties.

**All Building Construction Technology courses must be passed with a "C" or better to receive credit towards a certificate.**

### CERTIFICATE: CARPENTRY (29 CREDIT HOURS)

		<u>Credit Hours</u>
BCT 101	Introduction to Building Construction	5.0
BCT 102	Fundamentals of Building Construction	4.0
BCT 104	Site Layout and Preparation	2.0
BCT 111	Blueprint Reading and Specifications	3.0
BCT 131	Estimating/Quantity Take-off	2.0
BCT 142	Fundamentals of Construction Safety	4.0
BCT 212	Construction Methods and Design	3.0
BCT 221	Construction Building Codes	3.0
CWE 111	Cooperative Work Experience	1.0
WLD 102	Introduction to Welding	<u>2.0</u>
	<b>Total Credit Hours:</b>	29.0

# COMMERCIAL GRAPHICS COMMUNICATIONS

The Commercial Graphics Communications program is intended to prepare students for gainful employment in the large variety of graphic communications industries, including screen printing, offset lithographic production, and vehicle wrapping. The program includes hands-on technical instruction using the Adobe Creative Suite to create images for digital imaging, traditional printing production methods, screen-printing, and wide format production. Graduates will gain the skills necessary for employment as a graphics technician, in the printing industry as a production technician or in a variety of related industries, depending on their chosen career goal.

**Commercial Graphics courses must be passed with a “C” or better to receive credit towards a degree.**

**MAJOR: COMMERCIAL GRAPHICS (61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

## **A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation	1.0
ENG 160	Technical Communications (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
MAT 155	Contemporary Math (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
SPC 205	Public Speaking (O, H, V)	3.0
	Subtotal	<u>16.0</u>

## **B. MAJOR COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
CGC 101	Introduction to Graphic Techniques	3.0
CGC 111	Imaging for the Graphics Industry I	3.0
CGC 120	Graphic Processes	3.0
CGC 211	Digital Art Creation	3.0
CGC 212	Digital Image Manipulation	3.0
CWE 111	Cooperative Work Experience I	1.0
	Subtotal	<u>16.0</u>

## **C. ADDITIONAL COURSE REQUIREMENTS (29 CREDIT HOURS)**

		<u>Credit Hours</u>
BUS 101	Introduction to Business (O)	3.0
CGC 112	Imaging for the Graphics Industry II	3.0
CGC 135	Commercial Graphic Operations	3.0
CGC 140	Industry Exploration	3.0
CGC 220	Graphic Processes II	3.0
CGC 228	Digital Image Assembly	3.0
CGC 240	Senior Projects	3.0
CPT 170	Microcomputer Applications (O, V)	3.0

CWE 122	Cooperative Work Experience II	2.0
MKT 101	Marketing (O, V)	3.0
	Subtotal	29.0
	<b>Total Credit Hours:</b>	61.0

## GENERAL TECHNOLOGY

The associate degree program in General Technology allows students to tailor their coursework to meet their individual needs.

Students work with their advisors to develop a specific contract for the courses they will take under this degree. (To receive financial assistance, veterans must have prior approval of their programs by a VA counselor.)

**All Advanced Manufacturing and Skilled Trades courses must be passed with a “C” or better to receive credit towards a General Technology degree.**

**MAJOR: GENERAL TECHNOLOGY (60-84 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

Each contract must have the following elements:

**A. Minimum of 15 semester-hour credits in general education.**

The Associate in General Technology degree program requires a basic core of 15 credits in general education courses. One component of this core must be designed to develop oral and written communication skills and another component must be designed to develop computational skills. Other components of the core must be drawn from each of the following areas: information literacy, humanities or fine arts, social and behavioral sciences, natural sciences and mathematics.

**B. Minimum of 40 semester-hour credits in major.**

The major consists of a minimum of 28 semester-hour credits in an approved degree, diploma or technical education certificate program and an additional 12 semester-hour credits in another technical specialty.

Additional courses from the major technical specialty and courses from other technical specialties shall be chosen by students with guidance from their faculty advisor. Students adapt their program to employment objectives and compatible interests.

**C. A range of 5-29 semester-hour credits of electives and/or other additional courses is required for graduation.**

The courses in this section are used to adapt the program to meet local employer requirements and student needs.

Students' contracted programs must be approved by the department chair of the major technical specialty.

# HEATING, VENTILATION, AIR CONDITIONING/ REFRIGERATION TECHNOLOGY

The Heating, Ventilation, Air Conditioning/Refrigeration Technology program prepares students to work as entry-level technicians in residential and commercial air conditioning, refrigeration, and heating equipment installation and maintenance. Entry-level positions are available in hospitals, factories, schools, restaurants, office complexes, government agencies and local service companies. The associate degree program and shorter diploma and certificate programs are available.

**All Heating, Ventilation, Air Conditioning/Refrigeration Technology courses must be passed with a “C” or better to receive credit towards a degree, diploma or certificate.**

## **Special Requirements**

Students are required to purchase hand tools and personal safety equipment at a cost of approximately \$1050.

**MAJOR: HEATING, VENTILATION, AIR CONDITIONING/  
REFRIGERATION TECHNOLOGY (71 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

## **A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 160	Technical Communications (O, V)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0
COL 101	College Orientation	1.0
PSY 201	General Psychology (O, H, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
CPT 101	Introduction to Computers (O, H, V)	<u>3.0</u>
	Subtotal	16.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

## **B. MAJOR COURSE REQUIREMENTS (20 CREDIT HOURS)**

		<u>Credit Hours</u>
ACR 101	Fundamentals of Refrigeration	5.0
ACR 102	Tools and Service Techniques	3.0
ACR 106	Basic Electricity for HVAC/R	4.0
ACR 110	Heating Fundamentals*	4.0
ACR 120	Basic Air Conditioning	<u>4.0</u>
	Subtotal	20.0

## **C. ADDITIONAL COURSE REQUIREMENTS (35 CREDIT HOURS)**

		<u>Credit Hours</u>
ACR 130	Domestic Refrigeration	4.0
ACR 131	Commercial Refrigeration	4.0
ACR 206	Advanced Electricity for HVAC/R	2.0
ACR 207	Advanced Refrigeration Electricity	3.0

ACR 210	Heat Pumps	4.0
ACR 220	Advanced Air Conditioning	4.0
ACR 221	Residential Load Calculations*	2.0
ACR 224	Codes and Ordinances	2.0
ACR 231	Advanced Refrigeration	4.0
ACR 232	Refrigeration Calculation and Equipment Selection	3.0
ACR 250	Duct Fabrication	3.0
	Subtotal	<u>35.0</u>
<b>Total Credit Hours:</b>		71.0

## **AIR CONDITIONING/REFRIGERATION TECHNICIAN**

The diploma in Air Conditioning/Refrigeration Mechanics is also the first year of the Associate Degree in Heating, Ventilation, Air Conditioning Technology, including the summer semester. It provides the graduate with the basic technical, math and communication skills needed to enter the service industry.

### **Special Requirements**

Students are required to purchase hand tools and personal safety equipment at a cost of approximately \$1050.

**MAJOR: AIR CONDITIONING/REFRIGERATION TECHNICIAN  
(45 CREDIT HOURS)**

**DIPLOMA: APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (7 CREDIT HOURS)**

		<u>Credit Hours</u>
MAT 155	Contemporary Mathematics (O, V)	3.0
ENG 160	Technical Communications (O, V)	3.0
COL 101	College Orientation	1.0
CPT 101	Introduction to Computers (O, H, V)	<u>3.0</u>
	Subtotal	10.0

### **B. MAJOR COURSE REQUIREMENTS (27 CREDIT HOURS)**

		<u>Credit Hours</u>
ACR 101	Fundamentals of Refrigeration	5.0
ACR 102	Tools and Service Techniques	3.0
ACR 106	Basic Electricity for HVAC/R	4.0
ACR 110	Heating Fundamentals	4.0
ACR 120	Basic Air Conditioning	4.0
ACR 210	Heat Pumps	4.0
ACR 250	Duct Fabrication	3.0
ACR 130	Domestic Refrigeration	4.0
ACR 131	Commercial Refrigeration	<u>4.0</u>
	Subtotal	35.0
<b>Total Credit Hours:</b>		45.0

## **HEATING/VENTILATION/AIR CONDITIONING/ REFRIGERATION MECHANICS CERTIFICATE**

The certificate in Heating/Ventilation/Air Conditioning/Refrigeration is composed of the first-year technical courses of the Associate Degree in Heating, Ventilation, Air Conditioning Technology. It provides the graduate with the basic technical skills needed to enter the service industry.

### **Special Requirements**

Students are required to purchase hand tools and personal safety equipment at an approximate cost of \$1050.

### **CERTIFICATE: HEATING/VENTILATION/AIR CONDITIONING/ REFRIGERATION MECHANICS (35 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
ACR 101	Fundamentals of Refrigeration	5.0
ACR 102	Tools and Service Techniques	3.0
ACR 106	Basic Electricity for HVAC/R	4.0
ACR 110	Heating Fundamentals	4.0
ACR 120	Basic Air Conditioning	4.0
ACR 130	Domestic Refrigeration	4.0
ACR 131	Commercial Refrigeration	4.0
ACR 210	Heat Pumps	4.0
ACR 250	Duct Fabrication	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>35.0</b>

## **INDUSTRIAL ELECTRICITY/ELECTRONICS**

The Industrial Electricity/Electronics Diploma program emphasizes theory and hands-on training in electrical wiring, including the applications to residential, commercial and industrial installations. Although basic installation of electrical components is an important part of the technician's job, increased emphasis has been placed on wiring and programming of programmable logic controllers. Entry-level positions for graduates are available with local electrical contractors, industrial plants, hospitals, power companies, government agencies and other related businesses.

**All Industrial Electricity/Electronics courses must be passed with a "C" or better to receive credit towards a diploma or certificate.**

### **Special Requirements**

- > Students are required to purchase a set of small hand tools at an approximate cost of \$100.
- > Courses taken in this program may be applied toward the Associate in Applied Science in General Technology degree program if the student later elects to pursue the degree.

**MAJOR: INDUSTRIAL ELECTRICITY/ELECTRONICS  
(49 CREDIT HOURS)**

**DIPLOMA: APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 160	Technical Communications (O, V)	3.0
MAT 170	Algebra, Geometry & Trigonometry I (V)	3.0
PSC 215	State & Local Government (O, V)	3.0
	Subtotal	<u>9.0</u>

**B. MAJOR COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	Career Exploration	1.0
EEM 117	AC/DC Circuits I	4.0
EEM 140	National Electrical Code	3.0
EEM 151	Motor Controls I	4.0
EEM 201	Electronic Devices I	3.0
	Subtotal	<u>15.0</u>

**C. ADDITIONAL COURSE REQUIREMENTS (25 CREDIT HOURS)**

		<u>Credit Hours</u>
EEM 118	AC/DC Circuits II	4.0
EEM 141	Residential/Commercial Codes	3.0
EEM 142	Commercial/Industrial Codes	3.0
EEM 165	Residential/Commercial Wiring	4.0
EEM 166	Commercial/Industrial Wiring	4.0
EEM 172	Electrical Print Reading	4.0
EEM 251	Programmable Controllers	3.0
	Subtotal	<u>25.0</u>
	<b>Total Credit Hours:</b>	49.0

## **BASIC ELECTRICAL WIRING CERTIFICATE**

The Basic Electrical Wiring Certificate provides a fundamental knowledge of electrical wiring and AC and DC circuits. Students become familiar with electrical codes, ordinances, print reading and electricity fundamentals. Courses taken in this program may be applied toward the Diploma in Industrial Electricity if students later elect to pursue this program.

### **Special Requirements**

- > Students are required to purchase a set of small hand tools at an approximate cost of \$100.

- > Courses taken in this program may be applied toward the Associate of Applied Science in General Technology degree program if the student later elects to pursue the degree.

### **CERTIFICATE: BASIC ELECTRICAL WIRING (29 CREDIT HOURS)**

		<u>Credit Hours</u>
EEM 117	AC/DC Circuits I	4.0
EEM 118	AC/DC Circuits II	4.0
EEM 140	National Electrical Code	3.0
EEM 141	Residential/Commercial Codes	3.0
EEM 142	Commercial/Industrial Codes	3.0
EEM 165	Residential/Commercial Wiring	4.0
EEM 166	Commercial/Industrial Wiring	4.0
EEM 172	Electrical Print Reading	<u>4.0</u>
<b>Total Credit Hours:</b>		29.0

### **RENEWABLE ENERGY TECHNICIAN CERTIFICATE**

The Renewable Energy Technician Certificate provides a fundamental knowledge of electrical wiring, particularly as it applies to the growing field of alternative energy. Students are also given hands-on training in both roof-mount and ground mount solar panel installation, energy storage installation & management and other alternative energy options. Students become familiar with electrical codes, ordinances, print reading and electricity fundamentals. Courses taken in this program may be applied toward the Diploma in Industrial Electricity if students later elect to pursue this program.

#### **Special Requirements**

- > Students are required to purchase a set of small hand tools at an approximate cost of \$100.
- > Courses taken in this program may be applied toward the Associate of Applied Science in General Technology degree program if the student later elects to pursue the degree.

### **CERTIFICATE: RENEWABLE ENERGY TECHNICIAN (30 CREDIT HOURS)**

		<b>Credit Hours</b>
EEM 117	AC/DC Circuits I	4.0
EEM 118	AC/DC Circuits II	4.0
EEM 140	National Electrical Code	3.0
IMT 102	Industrial Safety	2.0
BCT 111	Blue Print Reading & Specifications	3.0
EEM 165	Residential/Commercial Wiring	4.0
SOL 101	Solar Building Fundamentals	3.0
SOL 120	Basic Solar Technology	3.0
SOL 201	Solar Photovoltaic Systems	<u>4.0</u>
<b>Total Credit Hours:</b>		30.0

## MACHINE TOOL TECHNOLOGY

The Machine Tool Technology program is designed to provide skilled machinists for manufacturing industries. The curriculum offers the knowledge and skills necessary to obtain entry-level jobs in a variety of manufacturing environments, as well as the potential to advance to supervisory, sales and training positions.

Students develop skills in the use of precision layout tools, layout techniques, and the setup and operation of mills, lathes, grinders, and other important conventional machines found in a machine shop. More advanced courses are taught in computer numerical control (CNC) programming, setup and operation, plastic injection molding, moldmaking, die making and repair, and jig and fixture design.

With the development of advanced technical systems, students can choose a variety of career paths. Examples are tool and die maker and computer numerical control setup and programming.

**All Machine Tool Technology courses must be passed with a “C” or better to receive credit towards a degree, diploma or certificate.**

### **Special Requirements**

Students are required to purchase a set of tools when beginning the Machine Tool Technology Program at a cost of approximately \$800.

**MAJOR: MACHINE TOOL TECHNOLOGY (73 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 160	Technical Communications (O, V)	3.0
MAT 170	Algebra, Geometry & Trigonometry I (O, V)	3.0
COL 101	Career Exploration	1.0
PSY 201	General Psychology (O, V)	3.0
HIS 202	American History: 1877 to the Present (O, V)	3.0
SPC 209	Oral Communications	
OR		
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
	Subtotal	16.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

### **B. MAJOR COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
MTT 151	Precision Machining I	3.0
MTT 152	Precision Machining II	3.0
MTT 153	Precision Machining III	3.0
MTT 154	Precision Machining IV	3.0
MTT 250	Principles of CNC*	<u>3.0</u>
	Subtotal	15.0

### C. ADDITIONAL COURSE REQUIREMENTS (42 CREDIT HOURS)

		<u>Credit Hours</u>
MTT 105	Machine Tool Math Applications	3.0
MTT 106	Machine Tool Computer Applications	3.0
MTT 120	Machine Tool Print Reading	3.0
MTT 141	Metals and Heat Treatment	3.0
MTT 155	Precision Grinding	3.0
MTT 171	Industrial Quality Control	2.0
MTT 212	Tool Design	4.0
MTT 215	Tool Room Machining I	4.0
MTT 216	Tool Room Machining II	4.0
MTT 246	Plastic Moldmaking I	2.0
MTT 253	CNC Programming and Operations	3.0
MTT 252	CNC Setup and Operations	4.0
MTT 258	Machine Tool CAM	3.0
	General Elective	<u>1.0</u>
	Subtotal	42.0
	<b>Total Credit Hours:</b>	73.0

## MACHINE TOOL

The diploma in Machine Tool is the first year of the Associate Degree in Machine Tool Technology and can be completed in 3 semesters. It provides the student with the basic skills in manual machining to enter the manufacturing or machining industry as well as general education courses that will enhance effectiveness in the workplace.

**MAJOR: MACHINE TOOL (44 CREDIT HOURS)**

**DIPLOMA: APPLIED SCIENCE**

### A. GENERAL EDUCATION COURSE REQUIREMENTS (9 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 160	Technical Communications (O, V)	3.0
MAT 170	Algebra, Geometry & Trigonometry I (O, V)	3.0
PSY 201	General Psychology (O, V)	<u>3.0</u>
	Subtotal	9.0

### B. MAJOR COURSE REQUIREMENTS (15 CREDIT HOURS)

		<u>Credit Hours</u>
MTT 151	Precision Machining I	3.0
MTT 152	Precision Machining II	3.0
MTT 153	Precision Machining III	3.0
MTT 154	Precision Machining IV	3.0
MTT 250	Principles of CNC	<u>3.0</u>
	Subtotal	15.0

### C. ADDITIONAL COURSE REQUIREMENTS (19 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	Career Exploration	1.0
MTT 105	Machine Tool Math Applications	3.0
MTT 106	Machine Tool Computer Applications	3.0
MTT 212	Tool Design	4.0
MTT 120	Machine Tool Print Reading	3.0
MTT 141	Metals and Heat Treatment	3.0
MTT 155	Precision Grinding	<u>3.0</u>
	Subtotal	20.0
	<b>Total Credit Hours:</b>	44.0

### MACHINE TOOL CERTIFICATE

The certificate in Machine Tool provides the first year of technical courses in the Associate Degree in Machine Tool Technology and can be completed in 2 semesters. It provides the student with the basic skills in manual machining to enter the manufacturing or machining industry.

#### CERTIFICATE: MACHINE TOOL (24 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 170	Algebra, Geometry, and Trigonometry	3.0
MTT 120	Machine Tool Print Reading	3.0
MTT 151	Precision Machining I	3.0
MTT 152	Precision Machining II	3.0
MTT 153	Precision Machining III	3.0
MTT 154	Precision Machining IV	3.0
MTT 105	Machine Tool Math Applications	3.0
MTT 106	Machine Tool Computer Applications	<u>3.0</u>
	<b>Total Credit Hours:</b>	24.0

### MECHATRONICS TECHNOLOGY

MTC's Mechatronics Technology Associate Degree prepares students to work in the highly automated manufacturing environment of the 21st century. The program is a good fit for students who desire a hands-on career and are technically inclined. The Mechatronics Technology Associate Degree is a 60-credit-hour program designed to be completed in six semesters if the student follows the program layout. The Mechatronics program responds to an industrial need to have trained technicians with "multi-craft" skills to work on equipment that ranges from packaging equipment to computer integrated manufacturing cells that produce anything from tires to automotive drive components to military grade weapons. The driving force behind the careers is the need for technicians to have skills that include electrical, mechanical, control, quality and computer technologies instead of specializing in one skill area. Mechatronics

technicians may assist the design and engineering staffs but are more likely to install, maintain, modify and repair electro-mechanical, manufacturing, automated or process control systems from within a maintenance department.

Students who have completed certain industrial maintenance courses in MTC's Corporate and Continuing Education may be eligible for advanced placement into this program. For more information, visit the Mechatronics Technology Degree webpage at <https://www.midlandstech.edu/programs-and-courses/advanced-manufacturing-and-skilled-trades/mechatronics-associate-degree>

**All Mechatronics Technology courses must be passed with a "C" or better to receive credit towards a degree or certificate.**

**MAJOR: MECHATRONICS TECHNOLOGY (60 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. General Education Course Requirements (16 credit hours)**

		<u>Credit Hours</u>
MAT 170	Algebra, Geometry & Trigonometry (O, V)	3.0
ENG 160	Technical Communications (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
COL 101	College Orientation	1.0
CPT 170	Computer Applications (O, H, V)	<u>3.0</u>
	Subtotal	16.0

**B. Major Course Requirements (44 credit hours)**

		<u>Credit Hours</u>
AMT 103	Sensors	3.0
AMT 105	Robotics and Automated Control I	3.0
AMT 160	Principles of Quality and Continuous Improvement	3.0
IMT 104	Schematics	3.0
IMT 110	Industrial Instrumentation	3.0
IMT 112	Hand Tool Operations	3.0
IMT 131	Hydraulics and Pneumatics	4.0
IMT 142	Electric Motors	2.0
IMT 151	Piping Systems	3.0
IMT 160	Preventative Maintenance	3.0
IMT 165	Mechanical Drives and Bearings	3.0
IMT 212	Electrical Theory	3.0
IMT 214	Industrial Wiring and Fluids	3.0
IMT 220	Electrical Distribution Equipment	3.0
IMT 233	Programmable Logic Controllers	<u>3.0</u>
	Subtotal	44.0
	<b>Total Credit Hours</b>	<b>60.0</b>

## MECHATRONICS TECHNOLOGY I CERTIFICATE

MTC's Mechatronics Technology I Certificate program prepares students to work in the highly automated manufacturing environment of the 21st century. The program is a good fit for students who desire a hands-on career and are technically inclined. The Mechatronics Technology Certificate is a 25 credit hour program designed to be completed in two semesters if the student follows the program layout. Course sequencing is structured but allows students to graduate in a fairly short time frame. Course topics include: AC/DC electricity, principles of manufacturing processes and production, print reading/CAD, industrial safety, hydraulics and pneumatics, programmable logic controllers, motors, basic principles of mechanics, sensors, and machine tool basics.

**All Mechatronics Technology courses must be passed with a "C" or better to receive credit towards a degree or certificate.**

Courses taken in this program may be applied toward the Associate in Applied Science in General Technology degree program if the student later elects to pursue the degree.

### CERTIFICATE: MECHATRONICS TECHNOLOGY I (25 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation	1.0
IMT 104	Schematics	2.0
IMT 112	Hand Tool Operations	3.0
IMT 131	Hydraulics and Pneumatics	4.0
IMT 165	Mechanical Drives and Bearings	
IMT 212	Electrical Theory	
IMT 214	Industrial Wiring	3.0
IMT 233	Programmable Logic Controllers	
MAT 170	Algebra, Geometry, and Trigonometry (O, V)	<u>3.0</u>
	<b>Total Credit Hours:</b>	25.0

## WELDING TECHNOLOGIES (Pending Approval)

The AAS in Welding prepares graduates for entry level welding positions within the fabrication, manufacturing, and construction industries that require skills in print reading, layout, welding and cutting processes.

The proposed program seeks to provide graduates with the skills necessary to succeed in positions ranging from aluminum welding for custom boat fabrication to pipe welding for nuclear power generation components. Graduates entering the workforce will be well versed in multiple welding disciplines, fabrication techniques, and job-site safety practices.

Students who have completed Welding courses in MTC's Corporate and Continuing Education may be eligible for advanced placement into this program. For more information, students should consult their Academic and Career Advisor.

**All Welding Technology courses must be passed with a "C" or better to receive credit toward a degree or certificate.**

## Special Requirements

Students are required to purchase approximately \$500 worth of welding tools and equipment.

**MAJOR: WELDING TECHNOLOGIES (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### A. General Education (16 Credit Hours)

		<u>Credit Hours</u>
CPT 101	Introduction to Computers (O, H, V)	3.0
COL 101	College Orientation	3.0
ENG 160	Technical Communications (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
MAT 170	Algebra, Geometry, and Trigonometry (O, V)	3.0
PSY 201	General Psychology (O, V)	<u>3.0</u>
	Subtotal	16.0

### B. Required Core Courses (46 Credit Hours)

		<u>Credit Hours</u>
WLD 102	Introduction to Welding	2.0
WLD 103	Print Reading I	1.0
WLD 105	Print Reading II	1.0
WLD 109	Gas Metal Arc Welding 2	3.0
WLD 110	Welding Safety and Health	1.0
WLD 111	Arc Welding I	4.0
WLD 115	Arc Welding III	4.0
WLD 120	Flux Cored Arc Welding I	4.0
WLD 134	Inert Gas Welding Non-Ferrous	3.0
WLD 136	Advanced Inert Gas Welding	2.0
WLD 140	Weld Testing	1.0
WLD 142	Maintenance Welding	3.0
WLD 154	Pipe Fitting and Welding	4.0
WLD 160	Fabrication Welding	3.0
WLD 170	Qualification Welding	4.0
WLD 202	Cutting Fundamentals	2.0
WLD 228	Inert Gas Pipe Welding I	<u>4.0</u>
	Subtotal	46.0
	<b>Total Credit Hours</b>	<b>62.0</b>

## **WELDING AND CUTTING FUNDAMENTALS (Pending approval)**

The Welding and Cutting Fundamentals Certificate includes the fundamentals of the most commonly used welding processes and provides graduates with the skills necessary to succeed in positions utilizing basic Shielded Metal Arc Welding, Gas Metal Arc Welding, Flux Cored Arc Welding, Gas Tungsten Arc Welding, Oxy-Fuel Cutting,

Plasma Arc Cutting, Carbon Arc Gouging, and Mechanical Cutting. Graduates entering the workforce will be well versed in multiple welding disciplines and job-site safety practices.

This certificate will is stackable with the more advanced Welding Qualifications Certificate and can be applied toward the Associate Degree in Welding Technology.

Students who have completed Welding courses in MTC's Corporate and Continuing Education may be eligible for advanced placement into this program. For more information, students should consult their Academic and Career Advisor.

**All Welding Technology courses must be passed with a "C" or better to receive credit toward a degree or certificate.**

### **Special Requirements**

- > Students are required to purchase approximately \$500 worth of welding tools and equipment.
- > Courses taken in this program may be applied toward the Associate in Applied Science in Welding Technologies.

## **CERTIFICATE: WELDING AND CUTTING FUNDAMENTALS (24 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
WLD 102	Introduction to Welding	2.0
WLD 103	Print Reading I	1.0
WLD 109	Gas Metal Arc Welding 2	3.0
WLD 110	Welding Safety and Health	1.0
WLD 111	Arc Welding I	4.0
WLD 115	Arc Welding III	4.0
WLD 120	Flux Cored Arc Welding I	4.0
WLD 134	Inert Gas Welding Non-Ferrous	3.0
WLD 202	Cutting Fundamentals	<u>2.0</u>
	<b>Total Credit Hours</b>	24.0

## **WELDING QUALIFICATIONS (Pending Approval)**

The Welding Qualifications Certificate covers advanced techniques in the most commonly used welding processes and provides graduates with the skills necessary to succeed in positions utilizing Shielded Metal Arc Welding, Gas Metal Arc Welding, Flux Cored Arc Welding, Gas Tungsten Arc Welding in advanced areas of manufacturing and construction to include fabrication and pipe welding. Graduates entering the workforce will be well versed in multiple welding disciplines and job-site safety practices.

This certificate will is stackable with the Welding and Cutting Fundamentals Certificate and can be applied toward the Associate Degree in Welding Technology.

Students who have completed Welding courses in MTC's Corporate and Continuing Education may be eligible for advanced placement into this program. For more information, students should consult their Academic and Career Advisor.

**All Welding Technology courses must be passed with a “C” or better to receive credit toward a degree or certificate.**

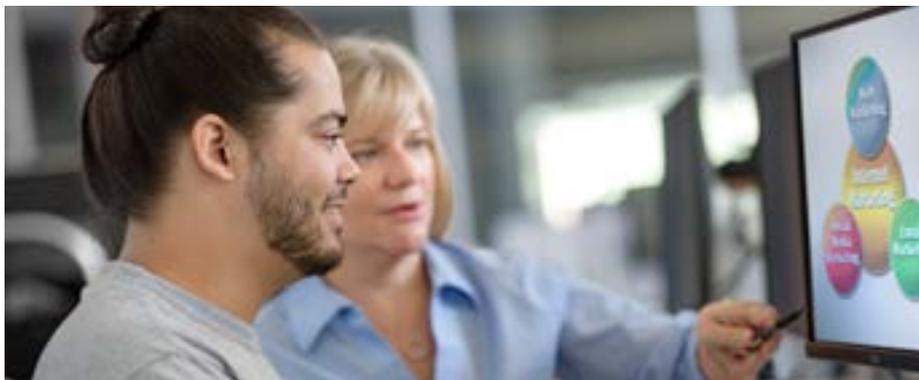
**Special Requirements**

- > Students are required to purchase approximately \$500 worth of welding tools and equipment.
- > Courses taken in this program may be applied toward the Associate in Applied Science in Welding Technologies.

**CERTIFICATE: WELDING QUALIFICATIONS (22 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
WLD 105	Print Reading 2	1.0
WLD 136	Advanced Inert Gas Welding	2.0
WLD 140	Weld Testing	1.0
WLD 142	Maintenance Welding	3.0
WLD 154	Pipefitting and Welding	4.0
WLD 160	Fabrication Welding	3.0
WLD 170	Qualification Welding	4.0
WLD 228	Inert Gas Pipe Welding I	<u>4.0</u>
	<b>Total Credit Hours</b>	<b>22.0</b>

# School of Business



MTC's School of Business offers a variety of educational programs designed to prepare students for careers in business and industry. Upon program completion, students are prepared to pursue the following business goals and/or careers:

- > Accounting – accountants, bookkeepers, auditors, tax consultants;
- > Administrative Office Technology -- office managers, executive assistants,
- > Management –sales, banking, logistics, manufacturing, quality assurance, purchasing, sourcing, hospitality, health care;
- > Marketing – product development, distribution planning, promotion, pricing, and retail sales.

## **Associate Degree Programs**

Accounting  
Administrative Office Technology  
Management  
Marketing  
Business Transfer (non-UofSC Moore School)  
Business Transfer  
(UofSC Moore School of Business  
Supply Chain Management)

## **Certificate Programs**

Accounting  
Customer Service  
Entrepreneurship  
Public Administration  
Supervision  
Digital Marketing  
Integrated Marketing Communications  
Sales and Retail Management

*All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).*

## **ACCOUNTING**

In business, managers at all levels must have updated financial information in order to make decisions that ensure the success of their firms. Accountants and auditors prepare, analyze and verify financial reports and data that furnish this essential information to their companies.

The Accounting program is designed to help students develop the skills necessary

for the highly technical and rapidly changing business environment. Certifications are offered in four (4) courses. Certifications can be earned in Excel, QuickBooks Accounting Software, Sage Accounting Software and Payroll. There are two prep courses for professional certifications as an Enrolled Agent (EA) (ACC 275) and Certified Bookkeeper (CB) (ACC 291). ACC 291 requires students to take the exam sections at a Prometric testing center. Certifications are awarded by the Internal Revenue Service (IRS) for the Enrolled Agent (EA) and by the American Institute of Profession Bookkeepers (AIPB) for the Certified Bookkeeper (CB). The EA and CB certifications require ongoing Continuing Professional Education (CPEs).

The accounting program is accredited by the Accreditation Council for Business Schools and Programs.

**Students must earn a grade of “C” or better in all of the courses that have the following prefixes: ACC, BAF, BUS, and CPT.**

### **Articulation Agreements**

Please see the Accounting Program Director for information on articulation agreements with any of the following:

Benedict College - BS Accounting  
 Claflin University – BS Organizational Management  
 Columbia College – BS Accounting  
 Limestone University - BS Accounting  
 National American University - BS Accounting  
 Southern New Hampshire University - BS Accounting  
 University of South Carolina – Interdisciplinary Studies (AAS)

**MAJOR: ACCOUNTING (64 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 101 College Orientation (H, V)	1.0
ECO 210 Macroeconomics (O, V)	3.0
ENG 101 English Composition I (O, H, V)	3.0
ENG 165 Professional Communications (O, H, V)	3.0
MAT 155 Contemporary Mathematics (O, H, V)	3.0
Approved Humanities Course	<u>3.0</u>
Subtotal	16.0

### **B. MAJOR COURSE REQUIREMENTS (27 CREDIT HOURS)**

	<u>Credit Hours</u>
ACC 101 Accounting Principles I (O, V)	3.0
ACC 102 Accounting Principles II (O, V)	3.0
ACC 111 Accounting Concepts (O, V)	3.0
ACC 124 Individual Tax Procedures (V)	3.0
ACC 201 Intermediate Accounting I (V)	3.0
ACC 202 Intermediate Accounting II (V)	3.0
ACC 240 Computerized Accounting (O)	3.0
ACC 245 Accounting Applications (O, H)	3.0

ACC 246	Integrated Accounting Software (O)	3.0
	Subtotal	<u>27.0</u>

**C. ADDITIONAL COURSE REQUIREMENTS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
BAF 201	Principles of Finance (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	<u>3.0</u>
	Subtotal	<u>9.0</u>

**D. ACCOUNTING ELECTIVES (12 CREDIT HOURS) -**

**Choose 4 from the following:**

		<u>Credit Hours</u>
ACC 150	Payroll Accounting (O)	3.0
ACC 224	Business Taxation (V)	3.0
ACC 260	Auditing (O)	3.0
ACC 265	Not-for-Profit Accounting (V)	3.0
ACC 275	Selected Topics in Accounting (O)	3.0
ACC 291	Certified Bookkeeper Review (H, V)	3.0
BUS 275	Accounting Internship	<u>3.0</u>
	Subtotal	12.0

**Total Credit Hours: 64.0**

## ACCOUNTING CERTIFICATE

The Certificate in Accounting is designed to allow students who have an AA/AS or BA/BS to continue their education either for career development, promotion, or new career opportunities. Since all of the courses listed in this certificate program are a subset of the Associate in Applied Science (AAS) in Accounting Degree, students may begin with an Accounting Certificate and continue taking courses to complete the Accounting Degree program. The Elective Choices allow students to specialize in Taxes (T) or Bookkeeping (B).

Certifications are offered in four (4) courses. Certifications can be earned in Excel, QuickBooks Accounting Software, Sage Accounting Software and Payroll. There are two prep courses for professional certifications as an Enrolled Agent (EA) (ACC 275) and Certified Bookkeeper (CB) (ACC 291). ACC 291 requires students to take the exam sections at a Prometric testing center. Certifications are awarded by the Internal Revenue Service (IRS) for the Enrolled Agent (EA) and by the American Institute of Profession Bookkeepers (AIPB) for the Certified Bookkeeper (CB). The EA and CB certifications require ongoing Continuing Professional Education (CPE)s.

**Students must earn a grade of “C” or better in all of the courses offered within the Accounting Certificate for the grade to be counted toward graduation.**

## **CERTIFICATE: ACCOUNTING CERTIFICATE (24 CREDIT HOURS)**

### **A. MAJOR REQUIREMENTS (18 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
ACC 102	Accounting Principles II (O, V)	3.0
ACC 201	Intermediate Accounting I (V)	3.0
ACC 240	Computerized Accounting (O)	3.0
ACC 245	Accounting Applications (O)	3.0
ACC 246	Integrated Accounting Software (O)	<u>3.0</u>
	Subtotal	18.0

### **B. Elective Choices (Select 2 of the Following – 6 credit hours)**

#### **Bookkeeper Electives**

ACC 150	Payroll Accounting (O)	3.0
ACC 202	Intermediate Accounting II (V)	3.0
ACC 265	Not-for-Profit Accounting (V, H)	3.0
ACC 291	Certified Bookkeeper Review (V, H)	3.0
BUS 121	Business Law (O)	3.0

#### **Taxation Electives**

ACC 124	Individual Tax Procedures (V)	3.0
ACC 224	Business Taxation (V)	3.0
ACC 265	Not-for-Profit Accounting (V, H)	3.0
ACC 275	Selected Topics in Accounting (O)	3.0
BUS 121	Business Law (O)	3.0

#### **Other**

ACC 111	Accounting Concepts (O)	3.0
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## **ADMINISTRATIVE OFFICE TECHNOLOGY**

With new technological advances in the office environment, the professional must fill many roles. The office professional works alongside the executive in decision making, research and public relations while using current office technology. The Administrative Office Technology (AOT) program is designed to provide students with the skills and experience necessary to achieve top-level information processing/administrative positions.

In addition to offering traditional office skills training, the program offers specialized courses in medical employment areas. The AOT program includes the use of the micro-computer and in-depth training on the most popular office software packages, such as Microsoft Word, Access, Excel, Publisher and PowerPoint.

### **Special Requirements**

Basic keyboarding is a skill necessary for successful course completion in the AOT program; therefore, AOT 105-Keyboarding is a prerequisite course for some AOT courses. Students are required to take AOT 105-Keyboarding or score 25 net words per minute (nwpm) on the keyboarding placement test.

Students must earn a grade of “C” or better in all of the courses offered within the AOT Curriculum for the grade to be counted toward graduation. Specifically, these include courses with the following prefixes: ACC, AOT, and CPT.

Students must meet all program exit competencies to graduate from this program.

**MAJOR: ADMINISTRATIVE OFFICE TECHNOLOGY  
(61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 101 College Orientation (V)	1.0
ENG 101 English Composition I (O, H, V)	3.0
ENG 165 Professional Communications II (O)	3.0
MAT 155 Contemporary Mathematics (O, V)	3.0
PHI 115 Contemporary Moral Issues (O, V)	
OR	
THE 101 Introduction to Theatre (O)	3.0
PSY 201 General Psychology (O, V)	3.0
Subtotal	<u>16.0</u>

**B. MAJOR COURSE REQUIREMENTS (42 CREDIT HOURS)**

	<u>Credit Hours</u>
AOT 110 Document Formatting (V)	3.0
AOT 133 Professional Development (H)	3.0
AOT 134 Office Communications	3.0
AOT 143 Office Systems and Procedures	3.0
AOT 161 Information Management (H)	3.0
AOT 210 Document Production (H)	3.0
AOT 234 Administrative Office Communications (H)	3.0
AOT 255 Senior Practicum	3.0
AOT 265 Office Desktop Publishing (O)	3.0
CPT 170 Microcomputer Applications (O, H, V)	3.0
CPT 172 Microcomputer Data Base	3.0
CPT 174 Microcomputer Spreadsheets (O)	3.0
CPT 179 Microcomputer Word Processing (O)	3.0
CPT 279 Advanced Microcomputer Word Processing (O)	3.0
Subtotal	<u>42.0</u>

**C. ADDITIONAL COURSE REQUIREMENTS (3 CREDIT HOURS)**

	<u>Credit Hours</u>
ACC 111 Accounting Concepts (O)	3.0
Subtotal	<u>3.0</u>
<b>Total Credit Hours:</b>	<b>61.0</b>

## CUSTOMER SERVICE CERTIFICATE

The Customer Service Certificate Program provides the educational competencies necessary for entry-level, professional employment in the numerous multi-dimensional careers of customer service. Students who complete the program will demonstrate the necessary skills to support the success of organizations committed to excellence in customer service.

The comprehensive, short-term Customer Service Certificate provides students with training in computer skills, communication (speaking and listening) and interpersonal skills, and sales and marketing techniques. They will also understand decision-making practices as well as be knowledgeable about and value the diverse backgrounds of customers.

**Students must earn a grade of “C” or better in all of the courses offered within the Customer Service Certificate for the grade to be counted toward graduation.**

Students must meet all exit program competencies for graduation from this program.

### **CERTIFICATE: CUSTOMER SERVICE (22 CREDIT HOURS)**

		<u>Credit Hours</u>
AOT 105	Keyboarding*	3.0
AOT 134	Office Communications	3.0
AOT 180	Customer Service	3.0
CPT 170	Microcomputer Applications (O, H, V)	3.0
MKT 135	Customer Service Techniques**	3.0
SPA 101	Elementary Spanish I (O, V)	4.0
SPC 209	Interpersonal Communication	
OR		
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>22.0</b>

#### **Note:**

\* AOT 105 Keyboarding or demonstrate keyboarding proficiency through the keyboarding placement test.

\*\* Appropriate course substitution will be made when this course is not offered.

## OFFICE SUPPORT SPECIALIST CERTIFICATE

The Office Support Specialist Certificate program offers students training in the latest technological advances in order to keep skills current, as well as provide traditional job skills needed for reentry into the office-job market. This program includes courses in keyboarding, transcription and written communication. It also includes in-depth training on popular software packages such as Microsoft Word, Access, Excel, and PowerPoint.

## Special Requirements:

Basic keyboarding is a skill necessary for successful course completion in the Office Support Specialist program; therefore, AOT 105-Keyboarding is a prerequisite course for most AOT courses. Students are required to take AOT 105-Keyboarding or score 25 net words per minutes (nwpm) on the keyboarding placement test.

Students must earn a grade of “C” or better in all of the courses offered within the Office Support Specialist Certificate for the grade to be counted toward graduation. Additionally, students must meet all exit program competencies for graduation.

## **CERTIFICATE: OFFICE SUPPORT SPECIALIST CERTIFICATE (30 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
AOT 110	Document Formatting (V)	3.0
AOT 134	Office Communications	3.0
AOT 143	Office Systems and Procedures	3.0
AOT 161	Records Management (H)	3.0
AOT 234	Administrative Office Communications	3.0
CPT 170	Microcomputer Applications (O, H, V)	3.0
CPT 172	Microcomputer Data Base	3.0
CPT 174	Microcomputer Spreadsheets (O)	3.0
CPT 179	Microcomputer Word Processing (O)	3.0
CPT 279	Advanced Microcomputer Word Processing (O)	<u>3.0</u>
	<b>Total Credit Hours</b>	30.0

## **BUSINESS TRANSFER PATHWAY**

Students wanting to earn a bachelor’s degree in a business-related but NOT planning to transfer to the University of South Carolina (UofSC) Moore School of Business can pursue the Business Transfer pathway within the Associate in Arts degree. This pathway is also a good choice for students seeking transfer to other business-related bachelor’s degrees at UofSC such as journalism, public relations, advertising, event planning, retailing, or sports management as well as those seeking transfer to business programs at other colleges and universities.

### **Articulation Agreements**

Please see a Program Director for information on articulation agreements with any of the following:

Clafin University – BS Organizational Management

Columbia College – Bachelor of Arts

South Carolina State – BS in Management; BS in Marketing

University of Phoenix – BX in Business Administration

**MAJOR: ASSOCIATE IN ARTS (63-64 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN ARTS**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)**

**1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	3.0
	Subtotal	9.0

**2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES  
(12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	3.0
ENG 203	American Literature Survey (O)	
OR		
ENG 209	World Literature II	3.0
PHI 115	Contemporary Moral Issues (O, V)	3.0
HIS 201	American History: Discovery to 1877 (O, V)	
OR		
HIS 202	American History: 1877 to Present (O, V)	3.0
	Subtotal	12.0

**3. MATHEMATICS/NATURAL LAB SCIENCE (7 CREDIT HOURS)**

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
BIO 101	Biological Science I (V)	4.0
	Subtotal	7.0

**Total General Education Credits: 28.0**

**B. COURSES FOR CONCENTRATION**

**(12-13 CREDIT HOURS IN COMMUNICATION, HUMANITIES,  
FINE ARTS, & SBS)**

		<u>Credit Hours</u>
ECO 210	Macroeconomics (O, V)	3.0
ECO 211	Microeconomics (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
	Foreign Language Or REL 103	
	If Foreign Language is not required	4.0 (3.0)
	<b>Total Concentration Credits:</b>	13.0 (12.0)

## C. ADDITIONAL REQUIREMENTS/ ELECTIVES (20 CREDIT HOURS)

### 1. COLLEGE SUCCESS REQUIREMENTS (2 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
IDS 112	Employability Skills for Careers	1.0
	Subtotal	<u>2.0</u>

### 2. COLLEGE-WIDE DIRECTED ELECTIVES (21 CREDIT HOURS)

**Choose 18 credit hours based on intended bachelor's degree:**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
ACC 102	Accounting Principles II (O, V)	3.0
BUS 240	Business Statistics (V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	3.0
HIS 102	World Civilization: Past 1689 (O, V)	
OR		
HIS 106	Introduction to African History	3.0
	Additional choices depending on the intended bachelor's degree include:	
	BUS 101, BUS 121, BUS 130, MGT 101,	
	MKT 101, MKT 110, MKT 120	<u>6.0</u>
	<b>Total College-Wide Elective Credits:</b>	23.0
	<b>Total Program Credit Hours:</b>	63.0-64.0

## SUPPLY CHAIN MANAGEMENT

### (TRANSFER TO UofSC MOORE SCHOOL OF BUSINESS)

Students wanting to earn a bachelor's degree from the University of South Carolina's Moore School of Business can follow this pathway to enter the Operations and Supply Chain Management bachelor's degree program at UofSC. Please see a Program Director for information on this articulation agreement.

Supply chain professionals are found in diverse industries and businesses from manufacturing, retail, aviation, health care, insurance, hospitality and technology. They work in roles such as sourcing, purchasing, production management, service delivery, quality assurance and improvement, distribution, supply chain optimization and business process improvement.

### **CONCENTRATION: SUPPLY CHAIN MANAGEMENT (62 CREDIT HOURS)**

**DEGREE:        ASSOCIATE IN ARTS**

## A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)

### 1. COMMUNICATIONS (9 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
	Subtotal	9.0

### 2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
ENG 205	English Literature I	3.0
HIS 101	Western Civilization to 1689 (O)	
OR		
HIS 102	Western Civilization Past 1689 (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	3.0
PSY 201	General Psychology (O, V)	<u>3.0</u>
	Subtotal	<u>12.0</u>

### 3. ANALYTICAL REASONING/SCIENCE (7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
BIO 101	Biological Science I (V)	
OR		
CHM 110	College Chemistry I (V)	<u>4.0</u>
	Subtotal	<u>7.0</u>

**Total General Education Credits:** 28.0

## B. ASSOCIATE IN ARTS DIRECTED ELECTIVES (15 CREDIT HOURS)

		<u>Credit Hours</u>
ECO 210	Macroeconomics (O, V)	3.0
ECO 211	Microeconomics (O, V)	3.0
IDS 112	Employability Skills for Careers	1.0
SPA 101	Elementary Spanish I (V)	4.0
SPA 102	Elementary Spanish II	<u>4.0</u>
	<b>Total Humanities Credits:</b>	15.0

## C. COLLEGE-WIDE DIRECTED ELECTIVES (19 CREDIT HOURS)

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
ACC 102	Accounting Principles II (O, V)	3.0
BUS 130	Business Communications (O, H, V)	3.0
BUS 240	Business Statistics	3.0
COL 101	College Orientation (V)	1.0

CPT 170	Microcomputer Applications (O, H, V)	3.0
MAT 130	Elementary Calculus (O, V)	<u>3.0</u>
<b>Total College-Wide Directed Elective Credits:</b>		19.0
<b>Total Program Credit Hours:</b>		62.0

## MANAGEMENT

The management program strengthens students' analytical, decision-making and problem-solving skills in the business world with an emphasis on human relations, leadership and critical thinking. Students will gain valuable insight into how businesses operate with high success as well as be prepared to make important contributions to an organization's future.

Graduates will be prepared for entry-level managerial positions in sales, marketing, banking, supervision, or small business administration.

The management program is accredited by the Accreditation Council for Business Schools and Programs (ACBSP).

**Students must earn a grade of "C" or better in all of the courses that have the following prefixes: ACC, BAF, BUS, CPT, MGT, and MKT.**

### **Articulation Agreements**

Please see the Business Program Director for information on articulation agreements with any of the following:

- Benedict College - BS Business Administration
- Coker University - BS Business Management
- Columbia International University - BS Business Administration
- Limestone University - BS Business Administration/Management
- National American University - BS Management
- Southern New Hampshire University - BS Business Administration
- University of Phoenix - BS Management

**MAJOR:           MANAGEMENT (62 CREDIT HOURS)**

**DEGREE:        ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
OR		
THE 101	Introduction to Theatre (O)	<u>3.0</u>
Subtotal		15.0

**B. COLLEGE SUCCESS REQUIREMENTS (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
IDS 112	Employability Skills for Careers	1.0
	Subtotal	<u>2.0</u>

**C. MAJOR BUSINESS COURSE REQUIREMENTS (30 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
ACC 102	Accounting Principles II (O, V)	3.0
BUS 101	Introduction to Business (O, H, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
BUS 130	Business Communications (O, H, V)	3.0
CPT 101	Introduction to Computers (O, H, V)	
	OR	
CPT 170	Microcomputer Applications (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	3.0
MGT 220	Operations Management I (O)	3.0
MGT 240	Management Decision Making (O, H, V)	<u>3.0</u>
	Subtotal	30.0

**D. APPROVED BUSINESS ELECTIVES (15 CREDIT HOURS)****(Choose 5 courses from any of the following)**

		<u>Credit Hours</u>
ACC 110	Accounting for Entrepreneurs	3.0
BAF 101	Personal Finance (O)	3.0
BUS 250	Introduction to International Business	3.0
BUS 275	Business Internship (O)	3.0
MGT 120	Small Business Management (O)	3.0
MGT 201	Human Resource Management (O)	3.0
MGT 206	Management Spreadsheets	3.0
MGT 215	Project Management (H)	3.0
MGT 250	Situational Supervision (O, H)	3.0
MKT 110	Retailing (O, H)	3.0
MKT 120	Sales Principles (O)	3.0
MKT 135	Customer Service Techniques (H)	3.0
MKT 245	Promotional Strategies	<u>3.0</u>
SC Fire Academy Courses (special substitution up to 15hrs)**		
	Subtotal	15.0

**Total Credit Hours: 62.0**

\*\*SC Fire Academy courses are not available at Midlands Technical College. See Program Director for more information

**MAJOR: MANAGEMENT with Certificate in Entrepreneurship****A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, V, H)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	3.0
OR		
THE 101	Introduction to Theatre (O)	<u>3.0</u>
	Subtotal	15.0

**B. COLLEGE SUCCESS REQUIREMENT (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (taken first year) (V)	1.0
IDS 112	Employability Skills for Careers (taken second year)	<u>1.0</u>
	Subtotal	2.0

**C. BUSINESS CORE REQUIREMENTS (21 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 101	Introduction to Business (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	3.0
OR		
CPT 101	Introduction to Computers (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	18.0

**D. MAJOR COURSE REQUIREMENTS (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
BUS 130	Business Communications (O, H, V)	3.0
MGT 220	Operations Management I	3.0
MGT 240	Management Decision Making (O)	3.0
OR		
BUS 275	Business Internship	<u>3.0</u>
	Subtotal	12.0

**E. ENTREPRENEURSHIP CONCENTRATION (21 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 110	Accounting for Entrepreneurs	3.0
BUS 116	Business Opportunity Analysis	3.0
BUS 131	Entrepreneurial Leadership (H)	3.0
MGT 201	Human Resource Management (O)	3.0
MKT 120	Sales Principles (O)	3.0

MKT 135	Customer Service Techniques (H)	3.0
MKT 245	Promotional Strategies	<u>3.0</u>
	Subtotal	21.0
	<b>Total Credit Hours</b>	68.0

**MAJOR: MANAGEMENT WITH CERTIFICATE IN  
PUBLIC ADMINISTRATION**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
OR		
THE 101	Introduction to Theatre (O)	<u>3.0</u>
	Subtotal	15.0

**B. COLLEGE SUCCESS REQUIREMENT (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (taken first year) (V)	1.0
IDS 112	Employability Skills for Careers (taken second year)	<u>1.0</u>
	Subtotal	2.0

**C. BUSINESS CORE REQUIREMENTS (21 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 101	Introduction to Business (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	
OR		
CPT 101	Introduction to Computers (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	18.0

**D. MAJOR COURSE REQUIREMENTS (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
BUS 130	Business Communications (O, H, V)	3.0
MGT 220	Operations Management I (O)	3.0
MGT 240	Management Decision Making (O, H)	
OR		
BUS 275	Business Internship	<u>3.0</u>
	Subtotal	12.0

**E. PUBLIC ADMINISTRATION CONCENTRATION (15 CREDIT HOURS)**

		<u>Credit Hours</u>
MGT 206	Management Spreadsheets (H)	3.0
MGT 215	Project Management (O, H)	3.0
MGT 250	Situational Supervision (O, H)	3.0
MKT 135	Customer Service Techniques (H)	3.0
PSC 215	State and Local Government (O, V)	<u>3.0</u>
	Subtotal	15.0
	<b>Total Credit Hours</b>	<b>62.0</b>

**MAJOR: MANAGEMENT WITH CERTIFICATE IN SALES AND RETAIL MANAGEMENT****A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
	OR	
THE 101	Introduction to Theatre (O)	<u>3.0</u>
	Subtotal	15.0

**B. COLLEGE SUCCESS REQUIREMENT (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (taken first year) (V)	1.0
IDS 112	Employability Skills for Careers (taken second year)	<u>1.0</u>
	Subtotal	2.0

**C. BUSINESS CORE REQUIREMENTS (21 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 101	Introduction to Business (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	3.0
	OR	
CPT 101	Introduction to Computers (O, H, V)	
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	18.0

**D. MAJOR COURSE REQUIREMENTS (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
BUS 130	Business Communications (O, H, V)	3.0

MGT 220	Operations Management I (O)	3.0
MGT 240	Management Decision Making (O, H, V)	
	OR	
BUS 275	Business Internship	<u>3.0</u>
	Subtotal	12.0

**E. SALES AND RETAIL MANAGEMENT CONCENTRATION  
(15 CREDIT HOURS)**

		<u>Credit Hours</u>
MGT 201	Human Resource Management (O)	3.0
MGT 250	Situational Supervision (O, H)	3.0
MKT 110	Retailing (O, H)	3.0
MKT 120	Sales Principles (O)	3.0
MKT 135	Customer Service Techniques (H)	<u>3.0</u>
	Subtotal	15.0
	<b>Total Credit Hours</b>	62.0

**MAJOR: MANAGEMENT WITH CERTIFICATE IN SUPERVISION**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
	OR	
THE 101	Introduction to Theatre (O)	<u>3.0</u>
	Subtotal	15.0

**B. COLLEGE SUCCESS REQUIREMENT (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (taken first year) (V)	1.0
IDS 112	Employability Skills for Careers (taken second year)	<u>1.0</u>
	Subtotal	2.0

**C. BUSINESS CORE REQUIREMENTS (21 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 101	Introduction to Business (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	
	OR	
CPT 101	Introduction to Computers (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	18.0

#### D. MAJOR COURSE REQUIREMENTS (12 CREDIT HOURS)

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
BUS 130	Business Communications (O, H, V)	3.0
MGT 220	Operations Management I (O)	3.0
MGT 240	Management Decision Making (O, H)	
OR		
BUS 275	Business Internship	<u>3.0</u>
	Subtotal	12.0

#### E. SUPERVISION CONCENTRATION (15 CREDIT HOURS)

		<u>Credit Hours</u>
BAF 101	Personal Finance (O)	3.0
BUS 250	Introduction to International Business	3.0
MGT 201	Human Resource Management (O)	3.0
MGT 206	Management Spreadsheets	3.0
MGT 250	Situational Supervision (H)	<u>3.0</u>
	Subtotal	15.0
	<b>Total Credit Hours</b>	<b>62.0</b>

### ENTREPRENEURSHIP CERTIFICATE

Developed by Midlands entrepreneurs for entrepreneurs, this innovative academic program will help students learn how to establish and operate a small business or strengthen an existing one. Students will gain a foundation in vital areas such as marketing, human resources, bookkeeping, computer skills, and the entrepreneurial mindset. This certificate can function as a stand-alone program or as part of the Associate Degree in Management.

**Students must earn a grade of “C” or better in all of the courses offered within the Entrepreneurship Certificate for the grade to be counted toward graduation.**

#### CERTIFICATE: ENTREPRENEURSHIP (27 CREDIT HOURS)

		<u>Credit Hours</u>
ACC 110	Accounting for Entrepreneurs	3.0
BUS 116	Business Opportunity Analysis	3.0
BUS 131	Entrepreneurial Leadership (H)	3.0
CPT 101	Intro to Computers (O, H, V)	
OR		
CPT 170	Microcomputer Applications (O, H, V)	3.0
ENG 101	English Composition (O, H, V)	3.0
MGT 201	Human Resource Management (O)	3.0
MKT 120	Sales Principles (O)	3.0
MKT 135	Customer Service Techniques (H)	3.0
MKT 245	Promotional Strategies	<u>3.0</u>
	<b>Total Credit Hours:</b>	<b>27.0</b>

## PUBLIC ADMINISTRATION CERTIFICATE

The Public Administration Certificate is designed to develop skills needed to excel within the public and not-for-profit sectors. This certificate provides a gateway for students to find research-based solutions to current challenges facing South Carolina and Midlands communities, their citizens, and surrounding economies.

Graduates of the Certificate in Public Administration will be prepared for a variety of jobs in state, county, and city levels of government. In addition, this program will provide graduates with the opportunity to earn certifications as a Certified Associate in Project Management (CAPM) and as a Microsoft Excel professional.

**Students must earn a grade of “C” or better in all of the courses offered within the Public Administration Certificate for the grade to be counted toward graduation.**

### **CERTIFICATE: PUBLIC ADMINISTRATION (27 CREDIT HOURS)**

		<u>Credit Hours</u>
BUS 130	Business Communications (O, H, V)	3.0
CPT 101	Intro to Computers (O, H, V)	
	OR	
CPT 170	Microcomputer Application (O, H, V)	3.0
ENG 101	English Composition (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MGT 206	Management Spreadsheets	3.0
MGT 215	Project Management (H)	3.0
MGT 250	Situational Supervision (O, H)	3.0
MKT 135	Customer Service Techniques (H)	3.0
PSC 215	State and Local Government (O, V)	<u>3.0</u>
	<b>Total Credit Hours:</b>	<b>27.0</b>

## SALES AND RETAIL MANAGEMENT CERTIFICATE

The Sales and Retail Management Certificate program includes coursework devoted to the theoretical and practical knowledge necessary for progressing in the sales and retail industries. The program focuses on the development of interpersonal, managerial, critical thinking, human resources and customer service skills. Completion of the certificate is intended to better qualify students for entry-level manager roles within large retail and sales organizations. This certificate can function as a stand-alone program or a concentration area within the Management Associate Degree program.

**Students must earn a grade of “C” or better in all of the courses offered within the Sales and Retail Management Certificate for the grade to be counted toward graduation.**

### **CERTIFICATE: SALES AND RETAIL MANAGEMENT (24 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition (O, H, V)	3.0
MGT 101	Principles of Management (O, H, V)	3.0

MGT 201	Human Resources Management (O, V)	3.0
MGT 250	Situational Supervision (O, V)	3.0
MKT 101	Marketing (O, H, V)	3.0
MKT 110	Retailing (O, H, V)	3.0
MKT 120	Sales Principles (O, H, V)	3.0
MKT 135	Customer Service Techniques (O, H)	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>24.0</b>

## **SUPERVISION CERTIFICATE**

The Supervision Certificate program includes coursework devoted to the theoretical and practical knowledge of supervision in the workforce. The program focuses on developing knowledge and skills that apply management practices in global business, human resources and other supervisor positions. Completion of the certificate is intended to better qualify students for entry level manager roles within organizations.

**Students must earn a grade of “C” or better in all of the courses offered within the Supervision Certificate for the grade to be counted toward graduation.**

### **CERTIFICATE: SUPERVISION (27 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
BAF 101	Personal Finance (O)	3.0
BUS 101	Introduction to Business (O, V)	3.0
BUS 250	Introduction to International Business	3.0
CPT 101	Introduction to Computers (O, H, V)	
	OR	
CPT 170	Microcomputer Applications (O, H, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MGT 201	Human Resource Management (O, V)	3.0
MGT 206	Management Spreadsheets	3.0
MGT 250	Situational Supervision (O, H)	<u>3.0</u>
<b>Total Credit Hours</b>		<b>27.0</b>

## **MARKETING**

Marketing is concerned with the distribution of goods and services from the producer to the consumer. The field of marketing has emerged as a dominant factor in the American economy.

Marketing graduates will enter the workforce with skills in sales, advertising, marketing research and techniques for acquiring marketing information. Graduates may be eligible for positions in digital marketing, merchandising, advertising, sales promotion, retail and marketing.

The marketing program is accredited by the Accreditation Council for Business Schools and Programs.

**Students must earn a grade of “C” or better in all of the business courses that have the following prefixes: ACC, BAF, BUS, MGT, and MKT.**

### **Articulation Agreements**

Please see the Business Program Director for information on articulation agreements with any of the following:

Benedict College - BS Business Administration

Coker University - BS Business Management

Limestone University - BS Marketing

National American University - BS Marketing

Southern New Hampshire University - BS Business Administration

**MAJOR:            MARKETING (62 CREDIT HOURS)**

**DEGREE:         ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
OR		
ART 101	Art History and Appreciation (O, V)	3.0
	Subtotal	<u>15.0</u>

### **B. COLLEGE SUCCESS REQUIREMENTS (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
IDS 112	Employability Skills for Careers	1.0
	Subtotal	<u>2.0</u>

### **C. BUSINESS CORE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 101	Introduction to Computers (O, H, V)	
OR		
CPT 170	Microcomputer Applications (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	3.0
	Subtotal	<u>15.0</u>

**D. MAJOR COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
ARV 121	Design	3.0
BUS 130	Business Communications (O, H, V)	3.0
MKT 111	Media Relations	3.0
BUS 275	Business Internship or	
MKT 260	Marketing Management (O)	<u>3.0</u>
	Subtotal	15.0

**E. APPROVED DEGREE ELECTIVES (MUST CHOOSE 5 COURSES FROM LIST BELOW)**

		<u>Credit Hours</u>
BUS 180	Social Media in Business	3.0
ENG 263	Writing for Digital Media	3.0
MGT 201	Human Resource Management (O)	3.0
MGT 250	Situational Supervision (O, H)	3.0
MKT 110	Retailing (O, H, V)	3.0
MKT 120	Sales Principles (O)	3.0
MKT 135	Customer Service Techniques (H)	3.0
MKT 140	E-Marketing (O)	3.0
MKT 240	Advertising	3.0
MKT 268	Market Research	<u>3.0</u>
	Subtotal	15.0
	<b>Total Credit Hours:</b>	62.0

**MAJOR: MARKETING WITH CERTIFICATE IN DIGITAL MARKETING****A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
	OR	
ART 101	Art History and Appreciation (O, V)	<u>3.0</u>
	Subtotal	15.0

**B. COLLEGE SUCCESS REQUIREMENT (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (taken first year) (V)	1.0
IDS 112	Employability Skills for Careers (taken second year)	<u>1.0</u>
	Subtotal	2.0

**C. BUSINESS CORE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	
	OR	
CPT 101	Introduction to Computers (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	15.0

**D. MAJOR COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
ARV 121	Design	3.0
BUS 130	Business Communications (O, H, V)	3.0
MKT 111	Media Relations	3.0
BUS 275	Business Internship	
	OR	
MKT 260	Marketing Management (O)	<u>3.0</u>
	Subtotal	15.0

**E. DIGITAL MARKETING CONCENTRATION (15 CREDIT HOURS)**

		<u>Credit Hours</u>
BUS 180	Social Media in Business	3.0
ENG 263	Writing for Digital Media	3.0
MKT 140	E-Marketing (O)	3.0
MKT 240	Advertising	3.0
MKT 268	Market Research	<u>3.0</u>
	Subtotal	15.0
	<b>Total Credit Hours</b>	62.0

**MAJOR: MARKETING WITH CERTIFICATE IN INTEGRATED MARKETING COMMUNICATIONS****A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
	OR	
ART 101	Art History and Appreciation (O, V)	<u>3.0</u>
	Subtotal	15.0

**B. COLLEGE SUCCESS REQUIREMENT (2 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (taken first year) (V)	1.0
IDS 112	Employability Skills for Careers (taken second year)	1.0
	Subtotal	<u>2.0</u>

**C. BUSINESS CORE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	
	OR	
CPT 101	Introduction to Computers (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	15.0

**D. MAJOR COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
ARV 121	Design	3.0
BUS 130	Business Communications (O, H, V)	3.0
MKT 111	Media Relations	3.0
BUS 275	Business Internship	
	OR	
MKT 260	Marketing Management (O)	<u>3.0</u>
	Subtotal	15.0

**E. INTEGRATED MARKETING COMMUNICATIONS CONCENTRATION (15 CREDIT HOURS)**

		<u>Credit Hours</u>
MKT 110	Retailing (H)	3.0
MKT 120	Sales Principles (O)	3.0
MKT 140	E-Marketing (O)	3.0
MKT 240	Advertising	3.0
MKT 268	Market Research	<u>3.0</u>
	Subtotal	15.0
	<b>Total Credit Hours</b>	62.0

**MAJOR: MARKETING WITH CERTIFICATE IN SALES AND RETAIL MANAGEMENT****A. GENERAL EDUCATION COURSE REQUIREMENTS (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ECO 211	Microeconomics (O, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0

ENG 102	English Composition II (O, H, V)	3.0
MAT 120	Probability & Statistics (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	
	OR	
ART 101	Art History and Appreciation (O, V)	3.0
	Subtotal	<u>15.0</u>

## B. COLLEGE SUCCESS REQUIREMENT (2 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation (taken first year) (V)	1.0
IDS 112	Employability Skills for Careers (taken second year)	<u>1.0</u>
	Subtotal	2.0

## C. BUSINESS CORE REQUIREMENTS (15 CREDIT HOURS)

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 121	Business Law I (O, H, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	
	OR	
CPT 101	Introduction to Computers (O, H, V)	3.0
MGT 101	Principles of Management (O, V)	3.0
MKT 101	Marketing (O, V)	<u>3.0</u>
	Subtotal	15.0

## D. MAJOR COURSE REQUIREMENTS (15 CREDIT HOURS)

		<u>Credit Hours</u>
ACC 102	Accounting Principles II (O, V)	3.0
ARV 121	Design	3.0
BUS 130	Business Communications (O, H, V)	3.0
MKT 111	Media Relations (H)	3.0
BUS 275	Business Internship	
	OR	
MKT 260	Marketing Management (O)	<u>3.0</u>
	Subtotal	15.0

## E. SALES AND RETAIL MANAGEMENT CONCENTRATION

		<u>Credit Hours</u>
MGT 201	Human Resource Management (O)	3.0
MGT 250	Situational Supervision (O, H)	3.0
MKT 110	Retailing	3.0
MKT 120	Sales Principles (O)	3.0
MKT 135	Customer Service Techniques (H)	<u>3.0</u>
	Subtotal	15.0
	<b>Total Credit Hours</b>	62.0

## DIGITAL MARKETING CERTIFICATE

The digital marketing certificate focuses on skills needed to create and manage successful online marketing campaigns for businesses both large and small. Students will gain valuable marketing and advertising skills as well as the ability to write for unique online products such as blogs, email campaigns, SMS alerts, and websites. In addition, they will learn basic design skills that apply to the creation of effective online communications used to build brand awareness, content marketing and sales.

**Students must earn a grade of “C” or better in all of the courses offered within the Digital Marketing Certificate for the grade to be counted toward graduation.**

### **CERTIFICATE: DIGITAL MARKETING (30 CREDIT HOURS)**

		<u>Credit Hours</u>
ARV 121	Design	3.0
BUS 130	Business Communications (O, H, V)	3.0
BUS 180	Social Media in Business	3.0
CPT 101	Introduction to Computers (O, H, V)	
	OR	
CPT 170	Microcomputer Applications (O, H, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 263	Writing for Digital Media	3.0
MKT 101	Marketing (O, V)	3.0
MKT 140	E-Marketing (O)	3.0
MKT 240	Advertising	3.0
MKT 268	Marketing Research	<u>3.0</u>
	<b>Total Credit Hours:</b>	30.0

## INTEGRATED MARKETING COMMUNICATIONS CERTIFICATE

The Integrated Marketing Communication Certificate (IMC) focuses on consistent branding and purpose-driven messaging for both internal and external stakeholders. This certificate is recommended for students with little knowledge of marketing and/or who do not know the area in which they would like to specialize. This certificate includes a broad range of on-trend courses to qualify students to work in a variety of general marketing roles. It can be taken as a stand-alone program or embedded certificate within the Marketing Associate Degree.

**Students must earn a grade of “C” or better in all of the courses offered within the Integrated Marketing Communications Certificate for the grade to be counted toward graduation.**

### **CERTIFICATE: INTEGRATED MARKETING COMMUNICATIONS (30 CREDIT HOURS)**

		<u>Credit Hours</u>
ARV 121	Design	3.0
BUS 130	Business Communications (O, H, V)	3.0

CPT 101	Introduction to Computers (O, H, V)	
OR		
CPT 170	Microcomputer Applications (O, H, V)	3.0
ENG 101	English Composition I (O, H, V)	3.0
MKT 101	Marketing (O, V)	3.0
MKT 110	Retailing (O, H)	3.0
MKT 111	Media Relations	3.0
MKT 120	Sales Principles (O)	3.0
MKT 140	E-Marketing (O)	3.0
MKT 240	Advertising (O)	3.0
MKT 268	Marketing Research	3.0
	<b>Total Credit Hours:</b>	<u>30.0</u>

# School of Education and Public Service



The School of Education and Public Service offers a variety of educational programs designed to prepare students for careers in education and public service arenas.

The public service arena is among the Midlands strongest growth areas in terms of available jobs.

Public Service programs and possible careers include:

- > Criminal Justice – police officer, corrections officer, or forensics lab specialist;
- > Early Childhood Development – (birth – 3rd grade) teacher in child care or Head Start, teacher assistant in public schools or transfer to a four year college to become a certified teacher;
- > Human Services – mental health, substance abuse, victim services, child welfare, or community agency/organization;
- > American Sign Language – sign language skills to use in business, education, or the community;
- > Paralegal Studies – work in small to large law firms and corporate or government legal offices.
- > Education Transfer - begin at Midlands Technical College and take classes to transfer to four year teacher education programs

**Students must earn a grade of “C” or better in all of the courses offered within the School of Education and Public Service for the grade to be counted toward graduation. Specifically, these include courses with the following prefixes: ASL, CRJ, ECD, EDU, HUS, LEG, and SAC.**

## **Associate Degree Programs**

Associate of Arts - Education Transfer  
Early Childhood/Elementary Education  
Associate of Arts - Education Transfer  
Middle Level

Criminal Justice Technology  
Early Care and Education  
Paralegal Studies  
Human Services

## **Certificate Programs**

Early Childhood Development

Criminal Justice – Homeland Security, Police Pre-Academy Training (Pending Approval)

Paralegal Studies

American Sign Language

*All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).*

## **CRIMINAL JUSTICE TECHNOLOGY**

Midlands Technical College offers an Associate in Applied Science Degree in Criminal Justice Technology. This degree is designed to prepare students for employment in the areas of law enforcement, correctional services, the courts, private security and juvenile services. The program covers a broad spectrum of criminal justice concepts and theories including police administration, criminal law, criminal evidence and procedures, and correctional systems and criminology, as well as appropriate general education courses. The structure of the program is designed for those currently serving in the various professions related to the Criminal Justice field as well as those interested in pursuing a career in these fields. The Criminal Justice program is also offered for students who are planning to transfer to a four-year college.

### **Special Requirements**

In order to complete the Criminal Justice Technology program, students must obtain a “C” or better in the 24 hours of required courses in the major. Also, 25 hours are required in general education courses and 13 hours of additional course requirements must be completed. This includes 6 hours of elective credits, of which 3 hours are to be selected from the list of approved electives found in the MTC Catalog. These electives allow students, along with their advisors, to tailor the program to particular needs.

**NOTE:** Criminal Justice Technology students cannot be certified as law enforcement officers until they reach the age of 21.

### **Articulation Agreements**

University of South Carolina Upstate – Criminal Justice

Columbia College – Criminal Justice

The Citadel – Criminal Justice

Newberry College – Criminal Justice

Coker University – Criminal Justice

Limestone College – Criminal Justice

South Carolina State University – Criminal Justice

University of South Carolina Columbia – Criminal Justice

While there is no formal articulation agreement with UofSC-Columbia, MTC students may transfer 19 of the 21 MTC courses to UofSC by only taking the specific electives as recommended by the CRJ advisors.

**MAJOR: CRIMINAL JUSTICE TECHNOLOGY (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

## A. GENERAL EDUCATION COURSE REQUIREMENTS (25 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
	Lab Science (V)	4.0
PSY 201	General Psychology (O, V)	3.0
SPC 205	Public Speaking (O, H, V)	3.0
CPT 101	Intro to Computers (O, H, V)	3.0
PHI 101	Intro to Philosophy (O)	3.0
HIS 201	American History: Discovery to 1877 (O, V)	3.0
	Subtotal	<u>25.0</u>

## B. MAJOR COURSE REQUIREMENTS (24 CREDIT HOURS)

		<u>Credit Hours</u>
CRJ 101	Introduction to Criminal Justice (O, V)	3.0
CRJ 115	Criminal Law I (O, H)	3.0
CRJ 125	Criminology (O)	3.0
CRJ 130	Police Administration (O)	3.0
CRJ 242	Correctional Systems (O)	3.0
CRJ 220	The Judicial Process (O, V)	3.0
CRJ 236	Criminal Evidence (O)	3.0
HSM 101	Intro to Homeland Security (O)	3.0
	Subtotal	<u>24.0</u>

## C. ADDITIONAL COURSE REQUIREMENTS (13 CREDIT HOURS)

		<u>Credit Hours</u>
PSC 201	American Government (O, V)	3.0
SOC 101	Introduction to Sociology* (O, V)	3.0
COL 101	College Orientation (V)	1.0
	Approved Elective	3.0
	General Elective	3.0
	Subtotal	<u>13.0</u>
	<b>Total Credit Hours:</b>	62.0

## CRIMINAL JUSTICE CERTIFICATE

This program is designed for practitioners employed by criminal justice agencies or for students wishing to diversify their major course of study. The purpose of the certificate program is to provide students with an academic post-secondary education in criminal justice. Courses taken will provide a theoretical and systems approach to the entire field of criminal justice. Courses completed satisfactorily may be used toward the Associate in Applied Science Degree in Criminal Justice Technology.

Areas of instruction focus on concepts, theories and processes pertaining to all areas of the criminal justice system, including police work and organization, criminal law,

causes of criminal behavior, rules of evidence and criminal procedures, and correctional services and systems.

### **CERTIFICATE: CRIMINAL JUSTICE (21 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
CRJ 101	Introduction to Criminal Justice (O)	3.0
CRJ 115	Criminal Law I (O)	3.0
CRJ 125	Criminology (O)	3.0
CRJ 130	Police Administration (O)	3.0
CRJ 220	The Judicial Process (O)	3.0
CRJ 236	Criminal Evidence (O)	3.0
CRJ 242	Correctional Systems (O)	<u>3.0</u>
<b>Total Credit Hours:</b>		21.0

### **HOMELAND SECURITY CERTIFICATE**

This certificate is designed to introduce the students to basic concepts in homeland security management. The program covers a variety of topics including crisis management, intelligence, security and terrorism. The structure of the program is designed for those currently serving in the various professions related to the Criminal Justice field.

### **CERTIFICATE: HOMELAND SECURITY MANAGEMENT (21 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
CRJ 101	Introduction to Criminal Justice (O, V)	3.0
CRJ 130	Police Administration (O)	3.0
HSM 101	Introduction to Homeland Security Management (O)	3.0
HSM 103	Introduction to Emergency Management (O)	3.0
HSM 104	Terrorism and Homeland Security (O)	3.0
HSM 201	Critical Incident Management (O)	3.0
HSM 203	Intelligence Analysis and Security Management (O)	<u>3.0</u>
<b>Total Credit Hours:</b>		21.0

### **POLICE PRE-ACADEMY TRAINING CERTIFICATE (Pending Approval)**

This certificate is for individuals who seek to become employed as a law enforcement officer in South Carolina and become Class-1 Certified Law Enforcement Officers (LEO) through the South Carolina Criminal Justice Academy (SCCJA) and the Law Enforcement Training Council (LETC) pursuant to South Carolina Code of Laws Chapter 23. This program allows graduates to begin the certification process as a law enforcement officer in South Carolina.

## **CERTIFICATE: POLICE PRE-ACADEMY TRAINING CERTIFICATE (12 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
CRJ 281	Police Science I	3.0
CRJ 282	Police Science II	3.0
CRJ 283	Police Science III	3.0
CRJ 284	Police Science IV	<u>3.0</u>
<b>Total Credit Hours:</b>		12.0

### **EDUCATION**

Midlands Technical College provides two types of opportunities for students interested in entering the field of education. Early Childhood Development qualifies students to enter the early childhood workforce. Education Transfer qualifies a student to complete teacher certification at a four-year institution.

Pathways specifically in Early Childhood Development lead to careers working with children ages birth through eight years, including child care centers, Head Start and Early Head Start centers, family child care homes, licensed group homes, after-school programs, programs for children with special needs, summer camp programs, and parenting programs. Students who complete this degree can be hired as teacher assistants in public schools. These programs are not designed to lead to teacher certification. However, MTC does have articulation agreements with several four-year institutions for those who want to work towards teacher certification after taking Early Care and Education courses. Please see an ECD Advisor to discuss various program plans and articulation agreements at the following institutions.

- > Columbia College
- > South Carolina State University
- > Newberry College
- > University of South Carolina

To explore these pathways, please see the section entitled “Early Childhood Development” below.

Pathways in early childhood, elementary, and middle level education are designed to lead to teacher certification after transfer to colleges and universities with four-year education degrees.

Students seeking to transfer to a four-year college to become a certified teacher for Pre-Kindergarten through eighth grade need to contact an Education Transfer advisor. Education transfer courses (EDU) are available at Midlands Technical College, along with plans for transferring to many in-state colleges and universities. Students planning on teaching at the high school level will major in their specific specialty (Math, Science, History, English, etc.).

Articulation agreements for Education Transfer students include those with:

- > Benedict College
- > Claflin University
- > Columbia College

- > Columbia International University
- > South Carolina State University
- > UofSC Columbia (Including Palmetto College for Elementary Education)

To explore these pathways, please see the sections entitled “Early Childhood/Elementary Education Concentration” and “Middle Level Education Concentration” below.

## **EARLY CHILDHOOD DEVELOPMENT**

The Early Childhood Development (ECD) Program is designed for individuals entering the field of early childhood education as well as for those already employed in the field who want to improve their job skills. The ECD program includes interactive classroom experiences as well as off-site experiences in a variety of nationally accredited child care and early education environments.

This program is accredited by the National Association for the Education of Young Children.

### **Special Requirements**

Students must earn a grade of “C” or better in all of the ECD courses offered for each of the following programs for the grade to be counted toward graduation. With the exception of ECD 101, Introduction to Early Childhood, and SAC 101, Best Practices in School-Age and Youth Care, all ECD students must take the placement test and complete (or test out of) ENG 100 and RDG 100. Students enrolled in lab classes must complete a SLED background check, physical, and TB test before attending lab sites. Please see your advisor about lab site forms and requirements.

## **EARLY CARE AND EDUCATION**

The Associate Degree in Early Care and Education is based on best practices and current research in the field of early childhood education. This degree provides students with the knowledge and skills necessary to promote optimal child development for all children, regardless of background or ability. In addition to focusing on competencies in child growth and development, health and safety, curriculum, family engagement, guidance, and hands-on experience in a variety of nationally accredited child care and early education facilities, the program is well grounded in ethics, advocacy, and leadership skills. In addition to working in child care and Head Start, the Associate Degree in Early Care and Education may also qualify students as instructional assistants in public school early childhood programs.

**MAJOR: EARLY CARE AND EDUCATION (61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

## A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	
OR		
ENG 165	Professional Communications (O)	3.0
PSY 201	General Psychology (O, V)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	<u>3.0</u>
	Subtotal:	16.0

## B. MAJOR COURSE REQUIREMENTS (39 HOURS)

		<u>Credit Hours</u>
ECD 101	Introduction to Early Childhood Development (H, V)	3.0
ECD 102	Growth and Development I (H, V)	3.0
ECD 105	Guidance and Classroom Management (O, H, V)	3.0
ECD 107	Exceptional Child (30-hour practicum) (O, H, V)	3.0
ECD 108	Family and Community Relations (10-hour practicum) (V)	3.0
ECD 131	Language Arts (H)	3.0
ECD 132	Creative Experiences (30-hour practicum)	3.0
ECD 133	Science and Math Concepts (H)	3.0
ECD 135	Health, Safety and Nutrition (H, V)	3.0
ECD 201	Principles of Ethics and Leadership in Early Childhood (O, H)	3.0
ECD 203	Growth and Development II (O, H, V)	3.0
ECD 237	Methods and Materials (O, H)	3.0
ECD 243	Supervised Field Experience (75-hour practicum)	3.0
OR		
ECD 251	Supervised Field Placements in Infant/Toddlers Environment (75-hour practicum)	<u>3.0</u>
	Subtotal:	39.0

## C. ADDITIONAL COURSE REQUIREMENTS (6-8 HOURS)

	<u>Credit Hours</u>
Choose at least 6 Credit Hours from Electives	<u>6.0</u>
Subtotal:	6.0
<b>Total Credit Hours:</b>	<b>61.0</b>

## ELECTIVES FOR EARLY CARE AND EDUCATION DEGREE

### Childcare Director

ECD 109	Administration and Supervision	3.0
MGT 120	Small Business Management (O, V)	3.0

## Infant/Toddler

ECD 200	Curriculum Issues in Infant/Toddler Development	3.0
ECD 205	Socialization and Group Care of Infants and Toddlers	3.0

## Transfer

BIO 101	Biological Sciences I (V)	4.0
CPT 101	Introduction to Computers (O, H, V)	3.0
EDU 201	Classroom Inquiry with Technology (H, V)	3.0
EDU 230	Schools in Communities (H, V)	4.0
EDU 241	Learners and Diversity (H, V)	4.0
SPC 205	Public Speaking (O, H, V)	3.0

## Other

ECD 138	Movement and Music for Children (H)	3.0
ECD 210	Early Childhood Intervention	3.0
SAC 101	Best Practices in School Age and Youth Care Skills	3.0

## EARLY CHILDHOOD DEVELOPMENT CERTIFICATE

The student in the 27-hour Early Childhood Development Certificate program will receive the tools and resources necessary to provide language and literacy rich environments, appropriate math and science skills, an inquiry based approach to learning about the world, and safe, healthy environments which promote the emotional and social well-being of all children. An emphasis will be placed on a variety of learning styles and inclusive environments to meet the needs of all children. Students will have experiences with a variety of ages and curriculum models through off-site labs in a nationally accredited child care, Head Start or Early Head Start, or public school early childhood program. This program is designed to meet the equivalency of a Child Development Associate (CDA) Credential. Courses completed satisfactorily may be used toward the Associate in Applied Science Degree in Early Care and Education.

### **CERTIFICATE: EARLY CHILDHOOD DEVELOPMENT (27 CREDIT HOURS)**

		<u>Credit Hours</u>
ECD 101	Introduction to Early Childhood (H, V)	3.0
ECD 102	Growth and Development I (H, V)	3.0
ECD 105	Guidance and Classroom Management (H, V)	3.0
ECD 107	Exceptional Children (O, H, V)	3.0
ECD 131	Language Arts (H)	3.0
ECD 132	Creative Experiences (30-hour practicum)	3.0
ECD 133	Science and Math Concepts (H)	3.0
ECD 135	Health, Safety and Nutrition (H, V)	3.0
ECD 203	Growth and Development II (O, H, V)	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>27.0</b>

# EARLY CHILDHOOD/ ELEMENTARY EDUCATION CONCENTRATION

(Transfer to 4-year College for Teacher Certification)

**CONCENTRATION: EARLY CHILDHOOD/ELEMENTARY EDUCATION  
(64 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN ARTS**

## **A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)**

### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
Subtotal		9.0

### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
GEO 102	World Geography (O, V)	3.0
HIS 202	American History 1877 to Present (O, V)	3.0
OR		
HIS 201	American History Discovery to 1877 (O, V)	
HIS 106	Introduction to African History (O)	
OR		
HIS 108	Introduction to East Asian Civilization (O)	<u>3.0</u>
Subtotal		12.0

### **3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)**

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
BIO 101	Biological Sciences I (V)	<u>4.0</u>
Subtotal		7.0
<b>Total General Education Credits:</b>		28.0

## **B. ASSOCIATE IN ARTS ELECTIVES (14 CREDIT HOURS)**

		<u>Credit Hours</u>
PHI 115	Contemporary Moral Issues (O, V)	3.0
SPA 101	Elementary Spanish I (O, H, V)	
OR		

FRE 101	Elementary French I	
OR		
GER 101	Elementary German I	4.0
SPA 102	Elementary Spanish II (O, H, V)	
OR		
FRE 102	Elementary French II	
OR		
GER 102	Elementary German II	4.0
PSC 201	American Government (O, V)	
ENG 207	Literature for Children	3.0
<b>Total Humanities Credits:</b>		<u>14.0</u>

**C. COLLEGE-WIDE ELECTIVES (18 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
EDU 201	Classroom Inquiry with Technology (H, V)	3.0
EDU 230	Schools In Communities (H, V)	4.0
EDU 241	Learners and Diversity (H, V)	4.0
MAT 250	Elementary Mathematics (V)	3.0
MAT 251	Elementary Mathematics II (V)	<u>3.0</u>
<b>Total College-Wide Elective Credits:</b>		18.0
<b>Total Program Credit Hours:</b>		64.0

**MIDDLE LEVEL EDUCATION CONCENTRATION**

(Transfer to 4-year College for Teacher Certification)

**CONCENTRATION: MIDDLE LEVEL EDUCATION (61-63 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN ARTS**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)**

**1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	3.0
Subtotal		<u>9.0</u>

**2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		

THE 101	Introduction to Theatre (O)	3.0
GEO 102	World Geography (O, V)	3.0
HIS 202	American History 1877 to Present (O, V)	3.0
	OR	
HIS 201	American History Discovery to 1877 (O, V)	
HIS 101	Western Civilization to 1689	
	OR	
HIS 102	Western Civilization Post 1689 (O, V)	3.0
	Subtotal	<u>12.0</u>

### 3. ANALYTICAL REASONING/SCIENCE (7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
BIO 101	Biological Sciences I (V)	4.0
	Subtotal	<u>7.0</u>
<b>Total General Education Credits:</b>		28.0

### B. ASSOCIATE IN ARTS ELECTIVES (15-17 CREDIT HOURS)

		<u>Credit Hours</u>
PHI 115	Contemporary Moral Issues (O, V)	3.0
ENG 208	World Literature I	
	OR	
HIS 105	World History I	
	OR	
SPA 101	Elementary Spanish I (O, H, V)	4.0 (3.0)
ENG 207	Literature of Children	
	OR	
ENG 209	World Literature II	
	OR	
SPA 102	Elementary Spanish II	
	OR	
PSC 201	American Government (O, V)	
	OR	
ENG 203	American Literature	
	OR	
ENG 205	English Literature I	4.0 (3.0)
HIS 104	World History I	3.0
	PSC 201 or HIS 106	
	ENG 207 or FRE 101, GER 101 or REL 103	3.0
		<u>3.0</u>
<b>Total AA Elective Credits:</b>		17.0 (15.0)

### C. COLLEGE-WIDE ELECTIVES (18 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
EDU 201	Classroom Inquiry with Technology (H, V)	3.0
EDU 230	Schools In Communities (H, V)	4.0
EDU 241	Learners and Diversity (O, H)	4.0
MAT 120	Probability and Statistics (O, V)	3.0

AST 101	Solar System Astronomy (O, H)	
OR		
GEO 205	Physical Geography (O, V)	4.0
<b>Total College-Wide Elective Credits:</b>		19.0
<b>Total Program Credit Hours:</b>		61.0-63.0

## **HUMAN SERVICES**

The Human Services Program is designed to graduate competent, caring and professional human services practitioners capable of filling entry and middle-level positions. The HUS program is a nationally accredited program with the Council for Standards in Human Services Education. We acknowledge that students learn in a variety of ways. As such, a variety of teaching methods are employed including analyzing case studies, developing group projects, completing a 20-hour practicum, two field placements totaling 300 hours, class discussions, peer interactions and various written activities and papers.

Career opportunities exist in youth services, disabilities and special needs, substance abuse, geriatric services, child development programs, child and family services and mental health units. There are also opportunities in the area of general social services as the foundation in behavioral science can be applied in a wide variety of areas.

As a member of the Council for Standards in Human Service Education (CSHSE) the Human Services Program provides graduates with the opportunity to earn a Human Services Board Certified Practitioner (HS-BCP) credential.

**NOTE:** This program is offered on the Airport Campus and Beltline Campus.

### **Special Requirements**

To complete the Human Services program, students must obtain a “C” or better in all HUS courses. A 20-hour practicum is required as part of HUS 101, Introduction to Human Services. Additionally, students must complete two supervised field placements (SFP). Each SFP requires that students complete 150 hours within an agency in the community. Approval for entering SFP is made by the program director. SLED or background checks may be required of student interns by some agencies. Students are responsible for their transportation to and from practicum and supervised field placement sites.

### **Articulation Agreements**

The Human Services Program has developed agreements with the following colleges and universities in order for graduates to seamlessly continue their education. These are:

- Benedict College – Social Work
- Columbia College – Human Services and Social Work
- Coker University – Human Services
- Lander University – Human Services
- Limestone College – Social Work
- Southern Wesleyan University – Human Services
- St. Leo University – Human Services

**MAJOR: HUMAN SERVICES (64 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (29 CREDIT HOURS)**

	<u>Credit Hours</u>
SPC 205 Public Speaking (O, H)	3.0
BIO 112 Basic Anatomy and Physiology (V)	
OR	
Lab Science	4.0
CPT 101 Introduction to Computers (O, H, V)	
OR	
CPT 170 Microcomputer Applications (O, H, V)	3.0
ENG 101 English Composition I (O, H, V)	3.0
ENG 102 English Composition II (O, H, V)	3.0
SOC 101 Introduction to Sociology (O, V)	3.0
PSY 201 General Psychology (O, V)	3.0
PSY 203 Human Growth and Development (O, V)	3.0
PHI 115 Contemporary Moral Ethics (O, V)	
OR	
Other Humanities Course	3.0
COL 101 College Orientation (V)	<u>1.0</u>
Subtotal	29.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

**B. MAJOR COURSE REQUIREMENTS (35 CREDIT HOURS)**

	<u>Credit Hours</u>
HUS 101 Introduction to Human Services (O, H)	3.0
HUS 102 Personal and Professional Development in the Helping Professions (O, V)	3.0
HUS 209 Case Management (O, H)	3.0
HUS 221 Professional Ethics in Human Services (O, H)	3.0
HUS 230 Interviewing Techniques* (O, H, V)	3.0
HUS 235 Group Dynamics (O, H)	3.0
HUS 237 Crisis Intervention (O, H)	3.0
HUS 250 Supervised Field Placement I	4.0
HUS 251 Supervised Field Placement II	4.0
HUS Elective	3.0
HUS Elective	<u>3.0</u>
Subtotal	35.0
<b>Total Credit Hours:</b>	64.0

**Electives:**

HUS 201	Family System Dynamics	3.0
HUS 204	Introduction to Social Work (O)	3.0
HUS 206	Death and Dying	3.0
HUS 207	Community Organizing	3.0
HUS 208	Alcohol and Drug Abuse (O)	3.0
HUS 217	Addictions Counseling (O)	3.0
HUS 231	Counseling Techniques	3.0
CRJ 101	Introduction to Criminal Justice (O)	3.0
ECD 101	Introduction to Early Childhood (H, V)	3.0

**AMERICAN SIGN LANGUAGE CERTIFICATE**

The American Sign Language (ASL) certificate is designed to prepare students for careers in the growing field of ASL communication and interpretation. The program also provides valuable language skills for a wide array of career areas including education, business, legal, health care and human services/social work. Please note that this is not to be confused with certification. However, completion of the certificate program may enable students to transfer to an interpreting program in preparation for certification as a sign language interpreter.

**CERTIFICATE: AMERICAN SIGN LANGUAGE (22 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
ASL 101	American Sign Language I (V)	4.0
ASL 102	American Sign Language II (V)	4.0
ASL 110	Careers in American Sign Language	2.0
ASL 201	American Sign Language III (V)	3.0
ASL 202	American Sign Language IV	3.0
ITP 106	Linguistics of American Sign Language (O)	
	OR	
SPC 208	Intercultural Communication	3.0
ITP 201	Deaf History and Culture	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>22.0</b>

**PARALEGAL STUDIES**

The Paralegal program prepares students to assist lawyers in carrying out their professional responsibilities. Paralegals may not provide legal services directly to the public, except as permitted by law, and must be mindful of prohibitions against lay persons practicing law. The paralegal manages cases for attorneys, conducts research, prepares documents, interviews clients. Diverse employment opportunities are available as a paralegal with law firms, courts, governments, corporate offices, insurance companies, real estate offices, mortgage companies, banks, and more..

This program is approved by the American Bar Association.

## Special Requirements

To be successful in this field, students should possess strong communication and computer/word processing skills.

**Students must earn a grade of “C” or better in all of the courses with an LEG prefix for the grade to be counted toward graduation.**

## Articulation Agreements

University of South Carolina – Interdisciplinary Studies (16 out of 20 courses will transfer to USC)

Columbia College – Community and Organizational Leadership (All 60 credits will transfer. Students add BIO 101 before transferring)

South University - Legal Studies

Lander University – Paralegal Studies

**MAJOR: PARALEGAL (61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

## A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
SPC 205	Public Speaking (O, H, V)	
OR		
BUS 130	Business Communications (O, H, V)	3.0
	Humanities Course	3.0
COL 101	College Orientation (V)	1.0
	Subtotal	<u>19.0</u>

Major courses meeting other college general education course requirements are starred (\*) below.

## B. MAJOR COURSE REQUIREMENTS (30 CREDIT HOURS)

		<u>Credit Hours</u>
LEG 120	Torts (V)	3.0
LEG 121	Business Law I (O)	3.0
LEG 122	Business Law II (V)	3.0
LEG 132	Legal Bibliography (H, V)	3.0
LEG 135	Introduction to Law and Ethics (V)	3.0
LEG 201	Civil Litigation I (V)	3.0
LEG 213	Family Law (V)	3.0
LEG 214	Property Law	3.0
LEG 233	Wills, Trusts and Probate (H, V)	3.0
LEG 242	Law Practice Workshop (O)	3.0
	Subtotal	<u>30.0</u>

### C. ADDITIONAL COURSE REQUIREMENTS (12 CREDIT HOURS)

		<u>Credit Hours</u>
CPT 101	Introduction to Computers (O, H, V)	3.0
LEG 232	Law Office Management (O, H)	3.0
	Two Approved LEG Electives	<u>6.0</u>
	Subtotal	12.0
	<b>Total Credit Hours:</b>	61.0

#### Credit Hours

#### Approved LEG electives include the following:

LEG 212	Workers' Compensation	3.0
LEG 215	Bankruptcy Law	3.0
LEG 220	Intellectual Property Law (V)	3.0
LEG 230	Legal Writing (O)	3.0
LEG 231	Criminal Law (O)	3.0
LEG 234	Title Examination Procedures I	3.0
LEG 270	Paralegal Certification Preparation	3.0

### PARALEGAL STUDIES CERTIFICATE

The Paralegal program prepares students to assist lawyers in carrying out their professional responsibilities. Paralegals may not provide legal services directly to the public, except as permitted by law and must be mindful of prohibitions against lay persons practicing law. The paralegal manages cases for attorneys, conducts research, prepares documents, interviews clients. Diverse employment opportunities are available as a paralegal with law firms, courts, governments, corporate offices, insurance companies, real estate offices, mortgage companies, banks, and more.

This program is approved by the American Bar Association.

#### Special Requirements

To enter the program, students must have earned a bachelor's degree from an accredited college or university. To be successful in this field, students should possess strong communication and computer/word processing skills.

Students must earn a grade of "C" or better in all of the courses for the grade to be counted toward graduation.

#### CERTIFICATE: PARALEGAL (24 CREDIT HOURS)

		<u>Credit Hours</u>
LEG 120	Torts (V)	3.0
LEG 121	Business Law I (O)	3.0
LEG 132	Legal Bibliography (H, V)	3.0
LEG 135	Introduction to Law and Ethics (V)	3.0
LEG 201	Civil Litigation I (V)	3.0

LEG 232	Law Office Management (H, O)	3.0
	Two Approved LEG Electives	<u>6.0</u>
	<b>Total Credit Hours:</b>	24.0

**Credit Hours**

**Approved LEG electives include the following:**

LEG 212	Workers' Compensation	3.0
LEG 215	Bankruptcy Law	3.0
LEG 220	Intellectual Property Law (V)	3.0
LEG 230	Legal Writing (O)	3.0
LEG 231	Criminal Law (O)	3.0
LEG 234	Title Examination Procedures I	3.0
LEG 122	Business Law II (V)	3.0
LEG 213	Family Law (V)	3.0
LEG 214	Property Law	3.0
LEG 233	Wills, Trusts, and Probates (H, V)	3.0

# School of English and Humanities



The School of English and the Humanities offers Associate in Arts degrees for students who seek careers in education, law, journalism, mass communication, cultural studies, or the fine arts. Within the School, students can choose from pathways in Art Studio, English, History, and Writing. The Departments of English and Humanities offer courses in art, English, foreign languages, history, music, philosophy, religion, speech, and theatre. Through their coursework, students hone their skills in expression, communication, and understanding, whether through understanding past or present cultures, or expressing themselves through writing, public speaking, or the creative arts. While some concentrations may offer students the opportunity to move directly into a career after completing their degree, students also have the option of transferring to a four-year college or university. A two-year Associate in Arts concentration in the School of English and the Humanities includes courses that many four-year colleges or universities require for completing a bachelor's degree.

*All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).*

## **ART STUDIO**

The Art Studio Concentration in the Associate in Arts program is designed to teach students the history, skills, and creative processes of professional artists. Courses in design, drawing, and painting provide students with an interdisciplinary exploration of visual, commercial, and industrial arts. This foundation helps prepare students for careers in a wide range of fields including illustration, animation, graphic design, conservation, and education. Much of the coursework from MTC's Art Studio AA Concentration can be applied toward a bachelor's degree at a four-year college or university, so the Art Studio Concentration is a great choice for students who wish to continue their education. Please note that most courses are available in a variety of modes including on-campus, online, and virtual.

**CONCENTRATION: ART STUDIO (60 CREDIT HOURS)****DEGREE: ASSOCIATE IN ARTS****A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)****1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
	Subtotal	9.0

**2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	3.0
ENG 222	Poetry, or an alternate: ENG 207 Literature for Children, ENG 214 Fiction, ENG 218 Drama, ENG 228 Studies in Film, ENG 238 Creative Writing	3.0
HIS 101	Western Civilization to 1689 (O), or an alternate: HIS 102 Western Civilization Post 1689 (O, V), HIS 104 World History I, HIS 105 World History II (O)	3.0
PSY 201	General Psychology (O, V), or an alternate: SOC 101 Introduction to Sociology (O, V), GEO 102 World Geography (O, V)	<u>3.0</u>
	Subtotal	12.0

**3. ANALYTICAL REASONING/SCIENCE (7 CREDIT HOURS)**

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)	
	OR	
PHI 105	Introduction to Logic (O)	3.0
BIO 112	Basic Anatomy and Physiology (V)	
	OR	
BIO 205	Ecology/BIO 206 Ecology Lab (O, V)	<u>4.0</u>
	Subtotal	7.0
<b>Total General Education Credits:</b>		28.0

**B. ASSOCIATE IN ARTS ELECTIVES (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 111	Basic Drawing I	3.0
ART 211	Introduction to Painting	3.0
ART 121	2-D Design Fundamentals	3.0
ART 122	3-D Design Fundamentals	3.0

ART 212 Introduction to Water Color	
OR	
ART 107 History of Early Western Art (H)	3.0
<b>Total Humanities Credits:</b>	<u>15.0</u>

### C. COLLEGE-WIDE ELECTIVES (18 CREDIT HOURS)

	<u>Credit Hours</u>
COL 105 Freshman Seminar	3.0
ART 108 History of Western Art (H)	3.0
ART 112 Basic Drawing II	3.0
FRE 101 or SPA 101,	4.0
FRE 102 or SPA 102	<u>4.0</u>
	17.0
<b>Total College-Wide Elective Credits:</b>	17.0
<b>Total Program Credit Hours:</b>	60.0

## ENGLISH

The English Concentration in the Associate in Arts program prepares students to transfer to four-year colleges and universities for the study of English or American Literature, Secondary Education, Library Science, Pre-Law, or other majors that require course work emphasizing critical thinking and reading, as well as analysis and communication skills. Please note that most courses are available in a variety of modes including on-campus, online, and virtual.

### CONCENTRATION: ENGLISH (61-62 CREDIT HOURS)

**DEGREE: ASSOCIATE IN ARTS**

### A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)

#### 1. COMMUNICATIONS (9 CREDIT HOURS)

	<u>Credit Hours</u>
ENG 101 English Composition I (O, H, V)	3.0
ENG 102 English Composition II (O, H, V)	3.0
SPC 205 Public Speaking (O, H, V)	<u>3.0</u>
Subtotal	9.0

#### 2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)

	<u>Credit Hours</u>
ART 101 Art History and Appreciation (O, V), or an alternate: THE 101 Introduction to Theatre (O), MUS 105 Music Appreciation (O, V)	3.0
ANT 202 Cultural Anthropology (O, V), or GEO 102 World Geography (O, V)	3.0

HIS 101	Western Civilization to 1689 (O), or HIS 102 Western Civilization Post 1689 (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V), or HIS 201 American History: Discovery to 1877 (O, V)	<u>3.0</u>
	Subtotal	12.0

### 3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V), or PHI 105 Introduction to Logic (O)	3.0
BIO 101	Biological Science I (V), or an alternate: BIO 205/206 Ecology and Lab (O), AST 101 Solar System Astronomy (O), AST 102 Stellar Astronomy (O)	<u>4.0</u>
	Subtotal	<u>7.0</u>
<b>Total General Education Credits:</b>		28.0

### B. ASSOCIATE IN ARTS ELECTIVES (15 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 203	American Literature Survey (O)	3.0
ENG 205	English Literature I, or an alternate: ENG 206 English Literature II, ENG 208 World Literature I, ENG 209 World Literature II	3.0
ENG 214	Fiction	3.0
ENG 238	Creative Writing, or an alternate: ENG 260 Advanced Technical Communications, ENG 263 Writing for Social Media	
ENG 299	Special Topics In English	<u>3.0</u>
<b>Total Humanities Credits:</b>		<u>15.0</u>

### C. COLLEGE-WIDE ELECTIVES (18-19 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (O, V)	3.0
CPT 101	Introduction to Computers (O, H, V), or CPT 170 Microcomputer Applications (O, H, V)	3.0
LNG 101	Introduction to Language, or an alternate: SPA 101 or SPA 102; FRE 101 or FRE 102; GER 101 or GER 102	3.0/4.0
PHI 101 OR	Introduction to Philosophy (O, V)	
PHI 115	Contemporary Moral Issues (O, V)	3.0
REL 103 OR	Comparative Religion (O)	

GEO 102	World Geography (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
<b>Total College-Wide Elective Credits:</b>		<u>18.0/19.0</u>
<b>Total Program Credit Hours:</b>		61.0/62.0

## HISTORY

The History Concentration in the Associate in Arts program prepares students to transfer to a four-year college or university in majors such as History, Education, Journalism, Pre-Law, or others that require more intensive course work in the humanities and/or social sciences than in mathematics and science. Studying the past can offer students the research, communication, and analytical skills needed for a career in law, government, research, or teaching. Whether in the classroom or the courtroom, a degree in history gives students the critical thinking skills and cultural awareness required to excel in a professional career. Please note that most courses are available in a variety of modes including on-campus, online, and virtual.

### **CONCENTRATION: HISTORY (60 CREDIT HOURS)**

#### **DEGREE: ASSOCIATE IN ARTS**

#### **A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)**

##### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
Subtotal		9.0

##### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Arts History and Appreciation (O, V), or an alternate: MUS 105 Music Appreciation (O, V), THE 101 Introduction to Theatre (O)	3.0
GEO 102	World Geography (O, V)	
OR		
GEO 101	Introduction to Geography	3.0
HIS 101	Western Civilization to 1689 (O), or an alternate: HIS 102 Western Civilization Post 1689 (O, V), HIS 104 World History I, HIS 105 World History II	3.0
PSY 201	General Psychology (O, V)	<u>3.0</u>
Subtotal		12.0

### 3. ANALYTICAL REASONING/SCIENCE (7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)	3.0
BIO 205	Ecology /BIO 206 Ecology Lab (O)	4.0
	Subtotal	<u>7.0</u>
<b>Total General Education Credits:</b>		28.0

### B. ASSOCIATE IN ARTS ELECTIVES (15 CREDIT HOURS)

		<u>Credit Hours</u>
HIS 201	American History: Discovery to 1877 (O, V)	
OR		
HIS 202	American History: 1877 to Present (O, V)	3.0
HIS 106	Introduction to African History, or an alternate: HIS 107 Introduction to the Middle East, HIS 108 Introduction to East Asian Civilization, HIS 109 Introduction to Latin American Civilization	3.0
HIS 113	Native American History, or an alternate: HIS 130 African-American History to 1877, HIS 131 African-American History 1877 to Present	3.0
HIS 230	The American Civil War, or an alternate: HIS 220 American Studies I, HIS 221 American Studies II	3.0
HIS 235	American Military History, or an alternate: HIS 220 American Studies I, HIS 221 American Studies II	<u>3.0</u>
<b>Total Humanities Credits:</b>		15.0

### C. COLLEGE-WIDE ELECTIVES (20 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (O, V)	3.0
SPA 101	Elementary Spanish I (O, H, V)	
OR		
FRE 101	Elementary French I	4.0
SPA 102	Elementary Spanish II (V)	
OR		
FRE 102	Elementary French II	4.0
ANT 202	Cultural Anthropology (O, V)	3.0
PSC 201	American Government (O, V),	
OR		
ECO 201	Economic Concepts (O)	<u>3.0</u>
		<u>17.0</u>
<b>Total College-Wide Elective Credits:</b>		17.0
<b>Total Program Credit Hours:</b>		60.0

## WRITING

The Writing Concentration in the Associate in Arts program prepares students to transfer to four-year colleges or universities for majors such as Creative Writing, Writing/Rhetoric/Publishing, Technical and Professional Communications, Social and Digital Media, Journalism and others with an emphasis on writing, communications, and media. Please note that most courses are available in a variety of modes including on-campus, online, and virtual.

### **CONCENTRATION: WRITING (61-63 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN ARTS**

#### **A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)**

##### **1. COMMUNICATIONS (9 CREDIT HOURS)**

	<u>Credit Hours</u>
ENG 101 English Composition I (O, H, V)	3.0
ENG 102 English Composition II (O, H, V)	3.0
SPC 205 Public Speaking (O, H, V)	3.0
Subtotal	<u>9.0</u>

##### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

	<u>Credit Hours</u>
THE 101 Introduction to Theatre (O)	
OR	
ART 101 Art History and Appreciation (O, V)	
OR	
MUS 105 Music Appreciation (O, V)	3.0
PSC 201 American Government (O, V)	
OR	
GEO 102 World Geography (O, V)	3.0
PSY 201 General Psychology (O, V)	
OR	
SOC 101 Introduction to Sociology (O, V)	3.0
HIS 202 American History: 1877 to Present (O, V)	
OR	
HIS 201 American History: Discovery to 1877 (O, V)	3.0
Subtotal	<u>12.0</u>

##### **3. ANALYTICAL REASONING/SCIENCE (7 CREDIT HOURS)**

	<u>Credit Hours</u>
MAT 120 Probability and Statistics, or	
PHI 105 Introduction to Logic (O, V)	3.0
BIO 101 Biological Science I (V), or an alternate:	
BIO 205/206 Ecology and Lab (O),	
AST 101 Solar System Astronomy (O),	

AST 102 Stellar Astronomy (O),		4.0
GEO 205 Physical Geography (H)		<u>7.0</u>
	Subtotal	7.0
<b>Total General Education Credits:</b>		28.0

## B. ASSOCIATE IN ARTS ELECTIVES (15 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 203	American Literature Survey (O)	3.0
ENG 238	Creative Writing (O)	3.0
ENG 260	Advanced Technical Communications (O)	3.0
ENG 263	Writing for Social Media	3.0
ENG 299	Special Topics In English	<u>3.0</u>
<b>Total Associate in Arts Credits:</b>		15.0

## C. COLLEGE-WIDE ELECTIVES (19 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (O, V)	3.0
CPT 170	Microcomputer Applications (O, H, V)	
	OR	
CPT 101	Introduction to Computers (O, H, V)	3.0
LNG 101	Introduction to Language , or an alternate: SPA 101 or SPA 102; FRE 101 or FRE 102; GER 101 or GER 102	4.0/3.0
PHI 115	Contemporary Moral Ethics (O, V)	3.0
HIS 102	Western Civilization Post 1689 (O, V)	
	OR	
HIS 101	Western Civilization to 1689 (O)	3.0
ENG 175	Proofreading and Editing, or an alternate: SPA 101 or SPA 102; FRE 101 or FRE 102; GER 101 or GER 102	<u>3.0/4.0</u>
<b>Total College-Wide Elective Credits:</b>		18.0/20.0
<b>Total Program Credit Hours:</b>		61.0/63.0

# School of Health Care



Midlands Technical College offers seven (7) associate degrees, three (3) diplomas and ten (10) certificate programs in the School of Health Care.

The college participates with Greenville Technical College in a cooperative arrangement to provide the first year general education courses for the Pre-Occupational Therapy Program; students complete their first year at MTC and transfer to Greenville Technical College to complete their clinical courses.

For additional information regarding programs within the School of Health Care please see the program's website at <https://www.midlandstech.edu/programs-and-courses/health-care>.

Programs within the School of Health Care have the mission of educating students to work in the fields of patient care, public health, research and policy. Graduates will enter health professions as integral members of the health care team. Educational enrichment, professional training, personal development and lifelong learning are primary concerns of the School of Health Care faculty and staff. Each program contains an academically sound curriculum of general academic education and technical health specialty education taught under the guidance of qualified health professionals in conjunction with local hospitals and health care facilities.

## **Associate Degree Programs**

Dental Hygiene  
Medical Laboratory Technology  
Nursing (ADN)  
Paramedic  
Physical Therapist Assistant  
Radiologic Technology  
Respiratory Care

## **Certificate Programs**

Advanced Cardiac and Vascular  
Interventional Radiology  
(pending approval)

## **Diploma Programs**

Expanded Duty Dental Assisting  
Practical Nursing (PN)  
Surgical Technology

## **Cooperative Programs**

Pre-Occupational Therapy Assistant

Medical Assisting  
Medical Office Administrative Assistant  
Nursing Assistant

Cardiac Care Technician	Nuclear Medicine Technology
Community Pharmacy Technician	Phlebotomy
Computed Tomography	Pre-Nursing
Emergency Medical Technology (Paramedic)	

*All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).*

### **College-wide Admission Procedures**

Applicants are required to follow regular college-wide admissions procedures, prior to being admitted to the School of Health Care programs and prior to becoming interview eligible. College admission and placement is determined through multiple measures including high school GPA, ACT/SAT scores or Accuplacer test scores. Applicants with prior college, especially those having completed degrees, should submit an official transcript as part of the admissions process.

### **School of Health Care Program Eligibility Requirements**

In addition to the general requirements for college admission, each program within the School of Health Care has specific criteria for eligibility. The specific requirements for each program are outlined on the following pages. The criteria are on file in the Admissions Office and the offices of program directors. Admission to the individual program is based on indicators of success within each program. In addition to standardized test scores, the following factors may be considered for admissions into programs within the School of Health Care: previous work experience; college grades in sciences, mathematics and other specific courses; and previous college credentials. Certain programs require observations at area health organizations prior to admission. Many programs within the School of Health Care require an interview prior to final acceptance.

Students can become eligible to interview for a program within the School of Health Care by completing all pre-requisites courses, by attaining a degree which includes all pre-requisite courses or by Merit or Nursing program by pre-nursing certificate; attaining a prior degree; or by merit or LPN Licensure requirements. Each of these ways is discussed in the next sections.

### **Standardized tests that may be taken as part of the criteria for interview eligibility include:**

- > Test of Essential Academic Skills (TEAS-V, September 2014 – Present) or one of the previous exams
- > Scholastic Aptitude Test (SAT)
- > American College Test (ACT)

Students who are admitted to the School of Health Care through high school GPA and for whom other measures place them into curriculum level English, math and reading courses are encouraged to take the above standardized program eligibility tests as soon as possible to establish an interview eligibility date. The standardized program eligibility tests noted above must have been taken within the previous three years to be utilized for meeting interview eligibility criteria for programs within the School of Health Care. The interview eligibility section for each program will note the appropriate test and required scores.

In addition to achieving acceptable standardized test scores for interview eligibility, students must place into curriculum level English courses. Some programs also require certain pre-requisite courses to be completed and a specific grade earned.

The student's Midlands Technical College and transfer coursework within the past ten years is reviewed to determine that required standards are met. Students should read this catalog, review information on program websites, and consult an academic advisor to understand the specific entry requirements for Health Sciences programs.

### **Requirements for students taking pre-requisite courses to become Interview eligible for Health Sciences Programs.**

In order to use the pre-requisite courses to meet program interview eligibility criteria, the student must meet the specified academic performance standards set forth below:

- > Must obtain the program grade point average (GPA) required by the designated program
- > Must obtain a grade of "C" or better in each course
- > Must NOT repeat any course in the curriculum more than once
- > Must NOT repeat more than 2 courses

"Ws" awarded since Fall 2008 counts as an attempt or a repeat with the exception of Ws awarded in Spring, Summer, and Fall 2020 and Spring and Summer 2021. Due to COVID-19, "Ws" awarded during these semesters WILL NOT count as an attempt NOR count against students in future semesters.

Students meeting the established criteria for academic success in the pre-requisite courses must complete an application to become interview eligible for the designated program. Completion of the pre-requisite courses does not guarantee admission into the program.

Applicants may obtain program pre-requisites credits via documentation of having earned a prior credits. Students should be aware that the college's transcript evaluator will determine which general education courses are acceptable for transfer to MTC. The health science program directors will evaluate health science technology courses for transfer only after the student has gained admission to the college and after the college's transcript evaluator determines general education courses eligible for transfer. The student's transfer coursework within the past ten years is reviewed to determine that required standards are met (for example, limitations on repeated coursework). Note that acceptance of transferred math and science courses are determined according to the timeframes listed below.

### **Merit Admission**

Students applying to programs within the School of Health Care may experience delays in entering their program because of the limited number of students accepted each year. The Dental Hygiene, Physical Therapist Assistant, Radiologic Technology and Respiratory Care Technology Programs offer a merit admission opportunity for certain highly qualified students meeting specific objective criteria to be admitted in advance of the chronological future entry list. The School of Health Care "course repeat" policy applies to coursework evaluated for merit admission.

Merit: only looks at the first grade attempted.

Students should access the programs' websites to review Merit Admissions Procedures for the following programs: Dental Hygiene, Nursing, Physical Therapist Assistant, Radiologic Technology, and Respiratory Care Technology.

Merit Information is on the college admissions website. Coursework evaluated for merit must be transferred into MTC with the exact Course Prefix and Course Number as listed

in the curricula displays in this catalog. Substitutions are not permitted.

### **Departmental Policy on Admission Deferrals**

Each individual program establishes its own deferment policies. Students are accepted for a specific class. If a student is unable to matriculate for that class, some programs allow the student to defer one time. If the student is unable to matriculate at this deferred time, then the student must re-apply. Other programs do not permit one time deferrals and require all students who are not able to enter their originally designated class to be placed at the bottom of the interview list.

### **Readmission to the Program**

Students who have an interruption of two semesters or less in the normal progression of their program of study, whether by failure or withdrawal, may apply to the program director for readmission. Space in these programs is very limited; therefore, students will be readmitted on a space-available basis and in accordance with readmission restrictions specific to each program. The student handbook of each program details specific readmission procedures, including restrictions on the number of readmissions allowed. If the student has been out of the program for three semesters or more, then the student must meet the current admissions criteria.

Nursing students out for 9 - 12 months will require a validation exam. Stop outs longer than 12 months, must re-apply and start the program over from the beginning. Additional information may be found in the Nursing student handbook or on the website.

### **Advanced Standing**

Programs within the School of Health Care may accept comparable technology course work from other colleges. The Program Director or Department Chair will evaluate technology courses for transfer only after the student has gained admission to the college and has met eligibility requirements for the technology program. The college's transcript evaluator determines general education courses eligible for transfer. If there are questions about the differences of content or competency levels in technology courses, then the student may be requested to pass a validation exam administered either in writing, orally or clinically. The student must pass the validation exam in accordance with required program grading standards.

Programs within the School of Health Care may also offer students advanced placement for comparable coursework from MTC's Corporate and Continuing Education as well as for professional licensure or certification. Students with an active C.N.A. licensure, L.P.N. license, or Paramedic license may be eligible for advanced placement in the Nursing Assistant and Pre-Nursing Certificate, the Associate Degree Nursing or the Associate Degree Emergency Technology (Paramedic) programs. See the Nursing Assistant, Pre-Nursing, Associate Degree Nursing, or Emergency Medical Technology (Paramedic) webpages for details.

### **Course Acceptance Timeframes**

School of Health Care Programs: All mathematics and science courses (to include AHS 102) must be taken according to the following criteria:

- > Grade of "C" completed within 3 years of program entry
- > Grade of "B" completed within 4 years of program entry
- > Grade of "A" completed within 5 years of program entry
- > Or must be validated in accordance with program standards

Other general education courses, completed with at least a “C” may be applied indefinitely for course credit within Health Care programs.

All academic major course work must be completed within the four years preceding graduation.

### **Course Repeats**

Students graduating from programs within the School of Health Care may not repeat non-technology courses more than once to earn the requisite “C” or above grade. The “course repeat policy” will be applied to all coursework attempted in the 5 years prior to the student’s applying for program eligibility status, whether the course work was completed at MTC or at other colleges.

The number of technology courses (courses which have the specific program prefix) that may be repeated is determined by the technology program and published in the program section of the catalog.

### **Graduation Requirements**

To graduate, students must meet all requirements of the specific curriculum and receive a grade of “C” or better (in accordance with the “repeat policy” above) in all courses within the academic major; i.e., courses which have the specific program prefix. Students must also receive a “C” or better in all science, mathematics and courses. Some program pre-requisites courses require that the student earn a “C” or better in all courses to progress to the clinical portion of the curriculum and/or for that certificate to be applied towards the parent degree. Students must also apply for graduation online.

### **Attendance**

Programs within the School of Health Care may have an attendance policy to comply with accreditation requirements. Faculty in each program will inform students of the applicable attendance policy.

### **Additional Requirements**

- > High school or college credits in biology, chemistry and algebra are recommended.
- > Emotional and physical ability (“Essential Functions” or “Technical Standards”) to carry out normal activities of patient care are determined by physical examination. “Essential Functions/Technical Standards” may be found on each program’s web page. Conditions that develop during the clinical or laboratory phases of training which prevent the student from carrying out the required activities may result in a delay in completion or temporary withdrawal from the program. In some cases, withdrawal may be permanent.
- > All students are required to purchase liability insurance through the college each semester as part of their student fees. The minimum amount of coverage required is \$300,000 each claim, \$600,000 each incident. The approximate cost of this coverage is less than \$5 per semester. Some clinical affiliates may require additional coverage or higher limits. Any additional insurance or coverage will be the responsibility of the student.
- > In addition to insurance, students may be required to purchase and maintain certain equipment, learning modules, supplies and uniforms as part of the educational program. These requirements will vary depending on the student’s program.

- > Upon acceptance, students are provided a health form and immunization record that must be completed and submitted no earlier than 6 months before and no later than the beginning of the first semester in their major unless a specific extension is granted by the program director or department chair. Nursing requires background check and drug test within 3 months of the start of the program. Students are not allowed to participate in clinical training until this requirement is met. All students must present satisfactory annual Tuberculosis Test results to remain in their program. Failure to complete these requirements may result in suspension or withdrawal from the program of study. Students must present evidence of adequate Hepatitis B antibody titer or begin the Hepatitis B vaccine protocol prior to program entry.
- > At the time of program entry, all students must present current certification in Basic Life Support (BLS) for the Health Care Provider, which would include adult, infant and child cardiopulmonary resuscitation (CPR) and Automated External Defibrillation (AED) skill training. Certification must be maintained in accordance with departmental and clinical affiliate policy. Some programs also require First Aid Certification.
- > Students entering the clinical portion of their program will be required to produce acceptable results from a background investigation that may include but is not limited to: criminal background check, including all places of residence since the age of 18; Sex Offenders Registry; Office of the Inspector General; FBI fingerprint record; and any other registry or records required by law. In addition to background checks, students will be required to produce acceptable results from drug screenings before their participation in any program within the School of Health Care. Clinical facilities may require additional background checks and additional drug screenings during the clinical rotations at the student's expense. Students must be eligible to rotate in all clinical locations utilized by the programs. Exclusion from any of the clinical locations based on a positive drug screen or criminal records check will prevent participation in clinical training. Information about possible exclusion criteria can be found on the program web page.
- > As an integral part of the learning experiences, students need to understand procedures from both the patient's point of view as well as the clinician's point of view. Students will be expected to practice skills on other students as appropriate, and in turn participate as the "practice patient" during lab exercises.
- > Eligibility for examination candidacy is determined by the individual state or national examination boards for each discipline. Eligibility for clinical rotation does not guarantee eligibility for licensing, certification or registry examinations.

### **Clinical Regulations**

The clinical phase of instruction is an essential portion of all programs within the School of Health Care. During this phase, students may be involved in either direct or indirect patient care.

Students are responsible for their own transportation during rotations and to off-campus program-related activities, including clinical and laboratories.

When participating in a clinical experience at any affiliate health care facility, students are governed by the college policies and the affiliate facility's regulations and protocols. Affiliate policies may require students to submit to the same drug testing procedures and criminal background checks that apply to employees of the facility.

Students may be dismissed from clinical activities and/or the program if found in violation of clinical affiliation policies. CPR certification must be current for clinical rotations. All immunizations and health tests must be kept current.

Students are required to observe standard precautions in all labs and clinics where there is a risk of exposure to blood and body fluids. Students must wear their identification badge while in clinical facilities in accordance with the “Lewis Blackman Patient Act of 2005.”

## **CARDIAC CARE TECHNICIAN CERTIFICATE**

The Cardiac Care Technician certificate will provide a foundation in health care careers, communication, soft skills, computers, and anatomy and physiology. Students will develop the basic skills necessary to monitor patients for any type of cardiac involvement in a health care setting. The student will be able to monitor basic ECGs and recognize cardiac dysrhythmias. Instructional methods will be varied including classroom, lab, online/hybrid, simulation/virtual reality, and clinical rotations.

The Cardiac Care Technician certificate may be an extension of the Nursing Assistant Certificate to earn stackable, short-term, entry-level certificates in the health care arena. Employment opportunities in South Carolina include positions in hospitals, medical and diagnostic laboratories, and doctor’s offices. More information can be found on the website at [www.midlandstech.edu/programs-and-courses/health-care/cardiac-care-academic-certificate](http://www.midlandstech.edu/programs-and-courses/health-care/cardiac-care-academic-certificate).

### **Special Requirements**

Students must receive a grade of “C” or better on all Cardiac Care Technician certificate courses. Students must pass a final comprehensive exit examination to graduate from the program. Students may not repeat certificate courses more than once, nor may they progress to the next semester until that course is passed. Students may repeat only two certificate courses.

Students are required to purchase uniform, name tag, and other supplies needed for lab/clinical.

Students will rotate through hospitals, medical and diagnostic laboratories and clinics in the MTC service area for practical experience in ECG and cardiac monitoring. Students will be required to comply with regulations required by off-campus clinical sites, which might include finger printing, background checks and drug screenings.

In addition to the college and Health Sciences Department admission requirements, specific interview eligibility criteria for the Cardiac Care Technician Certificate program include:

### **Admission Criteria:**

1. Documented attendance at a mandatory orientation session
2. Acceptable Criminal Background Check and drug screening results
3. Satisfactory compliance with required medical physical and immunization

requirements

4. Signed commitment statement
5. Current certification in First-Aid and CPR (American Heart for the Health Care Professional)

**MAJOR:           CARDIAC CARE TECHNICIAN (25 CREDIT HOURS)**

**CERTIFICATE: HEALTH SCIENCE**

		<u>Credit Hours</u>
BIO 110	General Anatomy and Physiology (O)	3.0
AHS 145	Electrocardiography	2.0
AHS 156	Electrocardiography Practicum	1.0
AHS 177	Cardiac Monitoring Applications	4.0
ENG 160	Technical Communications (O, V)	3.0
AHS 102	Medical Terminology (O)	3.0
AHS 205	Ethics and Law for Allied Health Professions (O, H)	3.0
AHS 131	Computers in Health Care (O, H)	3.0
AHS 180	Health Careers Preparation (H)	<u>3.0</u>
	<b>Total Credit Hours:</b>	25.0

## COMPUTED TOMOGRAPHY CERTIFICATE

The Computed Tomography Certificate is an advanced certificate and requires entering students to have completed an accredited radiologic technology, radiation therapy or nuclear medicine program. Because this program is an advanced certificate, it is strongly recommended that interested students meet with a Computed Tomography program faculty and/or Health Sciences advisor early in their matriculation at Midlands Technical College.

Computed tomography is a medical process that uses X-rays and computer processing to produce cross-sectional images or “slices” of the body part being scanned. These images of specific areas of the body provide physicians with clinical information in the detection, differentiation and therapy of disease. The Computed Tomography program at Midlands Technical College is a two-semester program of study. Admission is limited to those who meet the specific admissions criteria.

The program content is based on The American Registry of Radiologic Technologists (ARRT) clinical competency and CT registry specifications and the American Society of Radiologic Technologists (ASRT) Curriculum guide. All didactic courses are offered as a combination of online and on-campus classes. The clinical rotations are arranged for the student.

Students will receive clinical education in an affiliate hospitals' computed tomography department. The clinical rotations will be during day, night and/or weekend hours and will be scheduled by the program director. The clinical sites will be arranged for the accepted students.

Computed Tomography program graduates are eligible to take the American Registry of Radiologic Technologists in Computed Tomography, ARRT (CT) examination.

CT programs do not currently require accreditation. More information can be found on the website at [www.midlandstech.edu/programs-and-courses/health-care/computed-tomography](http://www.midlandstech.edu/programs-and-courses/health-care/computed-tomography).

### **Special Requirements**

#### ***Interview Eligibility Criteria:***

1. Registered and in good standing with the American Registry of Radiologic Technologists (ARRT) in radiography, nuclear medicine, or radiation therapy or registered and in good standing with the Nuclear Medicine Certification Board (NMTCB).
2. Two letters of reference.
3. Currently hold certification in radiography, nuclear medicine, or radiation therapy in the state of employment or location of the clinical rotation site.

#### ***Admission Criteria:***

- > Attend an information session.
- > Successfully complete formal interview.
- > Satisfactorily complete the health form, criminal background investigation and drug screening.
- > Present CPR certification (adult, infant and child) and first-aid certification cards at the Orientation. The CPR certification must be kept current while in the program.
- > Attend School of Health Care Orientation.

#### ***Graduation Requirements:***

- > Students must maintain a grade of “C” or higher in all required courses to remain in and graduate from the program.
- > Registered radiologic technologists, radiation therapists or nuclear medicine technologists who can provide appropriate documentation of required CT competencies or who work in a CT department may apply for exemption of the clinical component (RAD 150, RAD 160) with the program directors’ permission.

### **MAJOR: COMPUTED TOMOGRAPHY (22 CREDIT HOURS)**

### **CERTIFICATE: HEALTH SCIENCE**

		<b><u>Credit Hours</u></b>
RAD 103	Introduction to Computed Tomography	2.0
RAD 145	Computed Tomography Physics and Instrumentation	3.0
RAD 106	Patient Care In Computed Tomography	1.0
RAD 150	Clinical Applications I	4.0
AHS 206	Cross-sectional Anatomy for Medical Imaging	2.0
RAD 120	Principles of Computed Tomography	3.0
RAD 160	Clinical Applications II	6.0
RAD 285	Special Topics In Computed Tomography	<u>1.0</u>
	<b>Total Credit Hours:</b>	22.0

## **EXPANDED DUTY DENTAL ASSISTING**

The Expanded Duty Dental Assisting program includes instruction in restorative dentistry and preventive oral care, including teaching patients oral self-care, applying sealants to the grooves of patients' teeth, taking impressions of teeth, producing diagnostically acceptable dental radiographs (X-rays), polishing teeth and fillings, assisting the dentist, preparing the filling materials, scheduling patients, managing health information and monitoring nitrous oxide.

Employment opportunities in South Carolina include private practice positions for example chair-side dental assistants in General Dentistry as well as many specialty practices such as Oral Surgery, Orthodontics, Endodontics, Prosthodontics, Periodontics, and Pediatric Dentistry. EDDA graduates also have opportunities as treatment coordinators, OSHA compliance specialists, dental laboratory assistants, secretarial assistants and office managers. There are also opportunities in public health settings, hospital dental practices, prison dental clinics and insurance companies.

Related careers include dental product sales representative, infection control consultant for private dental offices, dental office business manager and dental assisting educator.

The Expanded Duty Dental Assisting program is accredited by the Commission on Dental Accreditation of the American Dental Association. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/expanded-duty-dental-assisting> for more information.

Graduates are recognized as Expanded Duty Dental Assistants (EDDA) by the SC State Board of Dentistry. Graduates are eligible to be credentialed as Certified Dental Assistants (CDA) upon satisfactory completion of the three examinations administered by the Dental Assisting National Board.

### **Special Requirements**

Students must receive a grade of "C" or better on all Expanded Duty Dental Assisting courses, as well as math, and science courses. Math and science courses must be completed according to the timeframe established for Health Science Programs. Students are required to pass a comprehensive examination in each clinical course to continue in the program the following semester. Additionally, they must pass a final comprehensive exit examination to graduate from the program. Students may not repeat Expanded Duty Dental Assisting courses more than once, nor may they progress to the next semester until that course is passed. Students may repeat only two Expanded Duty Dental Assisting courses.

Students are required to purchase and maintain a set of X-ray instruments, dental instruments, dentoforms, laboratory coats, standard uniforms (to include gloves and masks), shoes, name pin and safety glasses at an approximate cost of \$2,000.

Students are encouraged to join the Student American Dental Assistants' Association and to participate in its scheduled activities, including attendance at the annual meeting of the South Carolina Dental Assistants' Association. In addition, they are required to participate in scheduled activities, such as visits to elementary schools for dental health educational presentations, and to take three national examinations (ICE, RHS, GC).

Students will rotate through private dental offices and clinics in the MTC service area for practical experience in Expanded Duty Dental Assisting. Students will be required

to comply with regulations of off-campus clinical sites, which might include finger printing, background checks and drug screenings.

In addition to the college and Health Sciences Department admission requirements, specific interview eligibility criteria for the Expanded Duty Dental Assisting program include:

**Admission Criteria:**

- > Successful program interview
- > Acceptable criminal background check and drug screening results
- > High school diploma or equivalent

**MAJOR: EXPANDED DUTY DENTAL ASSISTING (49 CREDIT HOURS)**

**DIPLOMA: APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (13 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 106	Skills for College Success (O)	1.0
ENG 160	Technical Communications (O, V)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
BIO 110	Basic Anatomy and Physiology (O)	<u>3.0</u>
	Subtotal	13.0

**B. MAJOR COURSE REQUIREMENTS (13 CREDIT HOURS)**

		<u>Credit Hours</u>
DAT 113	Dental Materials	4.0
DAT 154	Clinical Procedures I	4.0
DAT 118	Dental Morphology	2.0
DAT 115	Ethics and Professionalism	1.0
DAT 122	Dental Office Management	<u>2.0</u>
	Subtotal	13.0

**C. ADDITIONAL COURSE REQUIREMENTS (23 CREDIT HOURS)**

		<u>Credit Hours</u>
DAT 127	Dental Radiography	4.0
DAT 123	Oral Medicine/Oral Biology	3.0
DAT 121	Dental Health Education	2.0
DAT 174	Office Rotations	4.0
DAT 177	Dental Office Experience	7.0
DAT 183	Specialty Functions	<u>3.0</u>
	Subtotal	23.0

**Total Credit Hours: 49.0**

## **DENTAL HYGIENE**

The Dental Hygiene program includes instruction in principles of preventive oral care, including teaching patients self-care, examining patients' head and neck areas for abnormal health status, nutritional counseling, smoking cessation, applying sealants to the grooves of patients' teeth, producing diagnostically acceptable dental radiographs (X-rays), managing pain and anxiety, removing deposits from patients' teeth with scaling procedures and managing health information.

Midlands Technical College students who complete the pre-requisite courses for the Dental Hygiene curriculum with a 2.5 GPA and "C" or above on all courses may apply for Phase II. Science and mathematics courses must be completed according to the timeframe established and published for all Health Sciences Programs. Coursework must be in compliance with the Health Science acceptance timeframes when the application for Phase II entry is submitted. The student's date of interview eligibility for Phase II is based upon the application submission date for Phase II.

Students in completing the pre-requisite courses should be aware that in the clinical phase of the Dental Hygiene program (Phase II), students will be expected to act as patients for classmates to practice all new skills, including infiltration anesthesia injections. Students who require antibiotics prior to dental procedures will be expected to comply with such self-medication so as to allow equitable classmate learning experiences during pre-clinical sessions. Students anticipating orthodontic procedures should complete their banding phase prior to entering into Phase II or they should delay initiation of the orthodontic procedures until the second year of Phase II.

Students entering Phase II of the Dental Hygiene Program will be required to have a background check and a drug screening prior to beginning pre-clinical activities. Arrangements will be made by the Allied Dental Education Program.

Employment opportunities in South Carolina include private practice positions as employees of dentists. There are also opportunities in public health settings, hospital dental practices, prison dental clinics and in dental hygiene education.

Related career roles include dental product sales representatives, infection control consultants for private dental offices and dental hygiene educators.

The Dental Hygiene program is accredited by the Commission on Dental Accreditation of the American Dental Association. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/dental-hygiene> for more information.

Completion of the five clinical semesters in Phase II qualifies the student to take the Dental Hygiene National Board, the passing of which is a prerequisite for licensure by the South Carolina Board of Dentistry. Students must also pass a Clinical Dental Hygiene Examination administered by a board approved testing agency to gain licensure in South Carolina.

### **Special Requirements**

#### ***Admissions Criteria:***

- > High school diploma or equivalent
- > Satisfactory interview results

All pre-requisite courses must be completed with a 2.5 GPA, including "C" or better in all courses, as one of the criteria for advancement to Phase II, the Dental Hygiene major curriculum. Students may not retake any pre-requisite course more than once.

Students may not retake more than two pre-requisite courses. Science and math courses must be completed according to the Health Sciences Departmental course acceptance timeframes. Other general education courses completed with at least a “C” may be applied indefinitely for course credit. After completing the pre-requisite Dental Hygiene course work, the student will fill-out the graduation clearance form on-line and submit an application for entry into Phase II, the Dental Hygiene Associate Degree program. The student will then be assigned an interview eligibility date. The student’s date of interview eligibility for Phase II is based upon the application date for Phase II.

Students in Phase II must receive a “C” or better on all dental hygiene courses and maintain a cumulative 2.0 GPA. Students may not repeat a major course more than once, nor may they progress until that course has been passed.

Students may not repeat more than two Phase II courses during their program matriculation.

A student may not be readmitted to the dental hygiene program more than once. Readmitted students will be expected to revalidate competencies prior to resuming participation in the program at the previous point of validated competence and may be required to comply with mutually agreed upon re-entry requirements.

Students are required to purchase and maintain a complete set of dental hygiene and X-ray instruments, clinical instruments, laboratory coats, standard uniforms (including gloves and masks), shoes, name pin and loupes at an approximate cost of \$5,500.

Students are required to pass a comprehensive examination in each clinical dental hygiene course to continue in the program the following semester. Students must pass a written competency examination prior to the third semester of Phase II. This competency exam tests students’ knowledge in all clinical and scientific subject matter presented during the Pre-Dental Hygiene Certificate and the first year in dental hygiene. All students will participate in a “Board Review” course prior to taking the Dental Hygiene National Board.

Primary clinical experience is gained in the on-campus dental clinic at the Airport Campus. Students may also rotate through local dental clinics, hospitals, private dental offices and nursing homes in the immediate area for practicum experiences in a variety of situations and with a range of age groups. Students will be required to comply with regulations of off-campus clinical sites, which might include finger printing, additional background checks and drug screening.

Pre-clinical practice is performed on classmate patients. Students accepted into Phase II of the Dental Hygiene program will be expected to act as patients for classmates to practice all new skills, including infiltration anesthesia injections. Students who require antibiotics prior to dental procedures will be expected to comply with such self-medication so as to allow equitable classmate learning experiences during pre-clinical sessions. Students anticipating orthodontic procedures should complete their banding phase prior to entry into Phase II or they should delay initiation of the orthodontic procedures until the second year of Phase II.

Students will be required to produce an acceptable background check and a drug screening prior to entering clinical Phase II of the Dental Hygiene Program. Arrangements will be made by the Allied Dental Education Program.

Students are encouraged to join their student professional organization and to participate in its scheduled activities, including attendance at the annual meeting. In addition,

they are required to participate in scheduled activities such as visits to elementary schools for dental health education presentations and dental screenings.

***Merit Admission Opportunity:***

Students may apply for merit admission after completing the pre-requisites for Dental Hygiene courses. Merit admission is an opportunity for a special consideration for priority admission into clinical Phase II of the Dental Hygiene Program. There are preset published criteria for merit admissions. The criteria and applications are available online at MIDLANDSTECH.EDU/dental, through the Allied Dental Education Program, or through the merit admission coordinator in the Admissions Department. \*\* Merit looks at the 1st grade attempted.

Prerequisite courses for Dental Hygiene coursework evaluated for merit admission must match the course prefix and number exactly except for the math requirement. Mat 102 or any higher math course will be accepted.

**MAJOR: DENTAL HYGIENE (78 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (17 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 106 College Orientation (O)	1.0
BIO 210 Anatomy and Physiology I (V)	4.0
ENG 160 Technical Communications (O, V)	3.0
MAT 155 Contemporary Math (O, V)	3.0
PSY 201 General Psychology (O, V)	3.0
PHI 115 Contemporary Moral Issues (O, V)	<u>3.0</u>
Subtotal	17.0

**B. MAJOR COURSE REQUIREMENTS (44 CREDIT HOURS)**

	<u>Credit Hours</u>
AHS 113 Head and Neck Anatomy	1.0
BIO 115 Basic Microbiology (V)	3.0
DHG 121 Dental Radiography	3.0
DHG 125 Tooth Morphology and Histology	2.0
DHG 140 General and Oral Pathology	2.0
DHG 141 Periodontology	2.0
DHG 143 Dental Pharmacology	2.0
DHG 151 Dental Hygiene Principles	5.0
DHG 161 Clinical Dental Hygiene I Foundations	4.0
DHG 175 Clinical Dental Hygiene II	5.0
DHG 230 Public Health Dentistry	3.0
DHG 239 Dental Assisting for DHGs	2.0
DHG 255 Clinical Dental Hygiene III	5.0
DHG 265 Clinical Dental Hygiene IV	<u>5.0</u>
Subtotal	44.0

### C. ADDITIONAL COURSE REQUIREMENTS (17 CREDIT HOURS)

		<u>Credit Hours</u>
BIO 211	Anatomy and Physiology II (V)	4.0
CHM 105	General Organic and Biochemistry (V)	4.0
DHG 115	Medical and Dental Emergencies	2.0
DHG 241	Integrated Dental Hygiene I	1.0
DHG 242	Integrated Dental Hygiene II	1.0
DHG 243	Nutrition and Dental Health	2.0
SOC 101	Introduction to Sociology (O, V)	<u>3.0</u>
	Subtotal	17.0
	<b>Total Credit Hours:</b>	78.0

### MEDICAL ASSISTING CERTIFICATE

Medical assistants perform a wide range of duties in physicians' offices, clinics and emergency medical centers. Clerical duties include screening and receiving patients; maintaining medical records; typing and transcribing medical reports; handling telephone calls and correspondence; entering data; filing insurance claims; and maintaining patient accounts. Clinical duties include preparing patients for examinations; taking vital signs; taking medical histories; assisting with examinations and treatments; performing routine office laboratory procedures (urinalysis, phlebotomy, CBC, specimen collection and shipment); performing electrocardiograms; and instructing patients for advanced procedures.

Required clinical experience (externship) is provided in a variety of outpatient settings including physician offices, clinics and emergency medical centers during the third semester of the program.

Program Goals:

1. To prepare competent entry-level medical assistants in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains.
2. To prepare students for a career that is easily articulated with other established health care careers, i.e. phlebotomy, nursing, paramedic, radiology, etc.
3. To prepare graduates for the national exam for Certified Medical Assistant (AAMA) or Registered Medical Assistants (AMT) demonstrating entry-level knowledge of medical assisting.

The Medical Assisting Certificate Program offered at the Airport Campus is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Medical Assisting Education Review Board (MAERB). Visit <https://www.midlandstech.edu/programs-and-courses/health-care/medical-assisting> for more information.

Third semester students should plan to take a medical assisting certification examination. Upon successful completion of the examination, graduates will receive the Certified Medical Assistant, CMA (AAMA) or the Registered Medical Assistant, RMA (AMT) credentials.

## Special Requirements

Students who are admitted to the Medical Assisting program are required to purchase and maintain scrubs (color TBA), white leak-resistant shoes and white laboratory coats at an approximate cost of \$150.00. Students must maintain at least a “C” in all Medical Assisting courses. Students may repeat no more than two program courses. All classes are at Airport Campus; students are admitted only during the fall semester.

In addition to the college and School of Health Care admission requirements, specific admissions criteria to the Medical Assisting program are:

- > High school diploma or equivalent
- > Acceptable admissions criteria:
  - Successful completion of all pre-requisite coursework
  - Complete application.
  - Program interview
  - Acceptable criminal background check and drug screening results at time of program entry.
  - Current First Aid and CPR certifications at time of program entry
- > Other criteria:
  - High school or college credits in science (recommended).

**MAJOR: MEDICAL ASSISTING (39 CREDIT HOURS)**

**CERTIFICATE: HEALTH SCIENCE**

### GENERAL EDUCATION COURSE REQUIREMENTS

		<u>Credit Hours</u>
AHS 102	Medical Terminology (O)	3.0
BIO 110	Basic Anatomy and Physiology (O)	3.0
ENG 160	Technical Communications (O, V)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0

### PROGRAM REQUIREMENTS

MED 103	Medical Assisting Introduction	3.0
MED 104	Medical Assisting Administrative Procedures 1	4.0
MED 109	Medical Business Records	3.0
MED 112	Medical Assisting Pharmacology 2	2.0
MED 113	Basic Medical Laboratory Techniques	3.0
MED 114	Medical Assisting Clinical Procedures	4.0
MED 117	Clinical Practice	5.0
MED 124	Medical Computer Practicum 3	<u>3.0</u>

**Total Credit Hours:** 39.0

### Recommended

MAT 155	Contemporary Mathematics (O, V)	3.0
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## **MEDICAL LABORATORY TECHNOLOGY**

Medical laboratory technicians provide a wide range of information for physicians to use in diagnosis and treatment. Technicians work in clinical settings under the supervision of medical laboratory scientists and pathologists and are required to perform precise tests and procedures to guarantee accurate information for patient care. Technicians analyze body fluids, isolate and identify microorganisms, study blood components, perform pre-transfusion tests and determine disease-related immune responses.

The MLT Degree program prepares students to operate computerized lab equipment in a safe, cost-effective manner and to use quality control methods of assigned procedures. Students acquire a working knowledge in the areas of hematology, urology, parasitology, immunology, clinical chemistry, clinical microbiology and blood banking. In addition, they develop important communication skills to be used in translating reports, records and results.

Graduates of the program are eligible to take the Board of Certification (BOC) examination offered by the American Society for Clinical Pathology (ASCP) to earn the designation Medical Laboratory Technician (MLT).

The program is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/medical-laboratory-technology> for more information.

### **Special Requirements**

Students are required to purchase and maintain standard white uniforms, fluid-resistant laboratory coats, white shoes and safety equipment at an approximate total cost of \$300. The American Society for Clinical Pathology Board of Certification examination fee is approximately \$215.

Students must attain a grade of "C" in all curriculum courses to successfully complete the program. No course may be repeated more than one time. No more than 2 courses within the curriculum program may be repeated and only one Medical Laboratory Technology (MLT prefix) course may be repeated.

Courses must be taken in the appropriate sequences.

In addition to the college and School of Health Care admission requirements, specific eligibility and interview criteria to the Medical Laboratory Technology program include:

#### ***Admissions Criteria:***

- > Observation in clinical setting
- > TOEFL test for international students
- > Interview by the Medical Laboratory Admissions Committee
- > Acceptable criminal background check and drug screening
- > Physical Examination with TB test (completed after interview) by entry date.

#### ***Other criteria:***

- > High school or college credits in science/mathematics (algebra, chemistry, physics, biology) recommended
- > High school diploma or equivalent

**MAJOR: MEDICAL LABORATORY TECHNOLOGY (75 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (17 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 106	Skills for College Success (O)	1.0
ENG 160	Technical Communication (O, V)	3.0
MAT 102	Intermediate Algebra (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
BIO 210	Anatomy and Physiology I (V)	4.0
PHI 115	Contemporary Moral Issues (O, V)	3.0
	Subtotal	<u>17.0</u>

*Major courses meeting other college general education core requirements are starred (\*) below.*

**B. MAJOR COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
MLT 110	Hematology	4.0
MLT 120	Immunohematology	4.0
MLT 130	Clinical Chemistry	4.0
MLT 205	Advanced Microbiology	4.0
	Subtotal	<u>16.0</u>

**C. ADDITIONAL COURSE REQUIREMENTS (42 CREDIT HOURS)**

		<u>Credit Hours</u>
BIO 211	Anatomy and Physiology II (V)	4.0
CHM 110	College Chemistry I (V)	4.0
MLT 102	Medical Lab Fundamentals	3.0
MLT 104	Basic Medical Microbiology	2.0
MLT 108	Urinalysis & Body Fluids	3.0
MLT 115	Immunology	3.0
MLT 210	Advanced Hematology	4.0
MLT 230	Advanced Clinical Chemistry	4.0
MLT 260	Clinical Practicum I	3.0
MLT 270	Clinical Applications*	12.0
	Subtotal	<u>42.0</u>

**Total Credit Hours: 75.0**

**MEDICAL OFFICE ADMINISTRATIVE ASSISTANT CERTIFICATE**

The Medical Office Administrative Assistant Certificate provides the training students need as specialists in administrative support activities in hospitals, free standing outpatient clinics, and group practices with large numbers of physicians and medical support personnel. The focus of the program is on the clerical and administrative functions with no clinical training or responsibilities. However, students in the program will

receive course work in medical office procedures and terminology to insure a sound basic understanding of the environment in which they will work.

### **Special Requirements:**

Basic keyboarding is a skill necessary for successful course completion in the Medical Office Administrative Assistant program; therefore, AOT 105-Keyboarding is a prerequisite course for most AOT courses. Students are required to take AOT 105-Keyboarding or score 25 net words per minutes (nwpm) on the keyboarding placement test.

Students must earn a grade of "C" or better in all of the courses offered within the Medical Office Administrative Assistance Certificate for the grade to be counted toward graduation.

Students must meet all exit program competencies for graduation from this program.  
\*Click here for more information on the website.

## **CERTIFICATE: MEDICAL OFFICE ADMINISTRATIVE ASSISTANT (40 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
ACC 111	Accounting Concepts (O, V)	3.0
AHS 102	Medical Terminology (O)	3.0
AOT 110	Document Formatting (H, V)	3.0
AOT 133	Professional Development (H)	3.0
AOT 134	Office Communications	3.0
AOT 164	Medical Information Processing	3.0
AOT 196	Office Confidentiality and Security	3.0
AOT 212	Medical Document Production	3.0
AOT 250	Advanced Information Processing	3.0
AOT 252	Medical Systems and Procedures	3.0
AOT 271	SCWE in Administrative Office	4.0
BIO 110	General Anatomy & Physiology (O)	3.0
CPT 170	Microcomputer Applications (O, H, V)	3.0
	<b>Total Credit Hours:</b>	<u>40.0</u>

## **NUCLEAR MEDICINE CERTIFICATE**

Nuclear medicine technologists use radioactive materials and sophisticated electronic scanning equipment techniques to image the body and treat disease. The responsibilities of a nuclear medicine technologist includes safe and proper handling of radioactive materials, care and operation of radiation detection equipment, knowledge of technical and biological principles and most importantly, patient care. The applied skills of nuclear medicine technologists complement nuclear medicine physicians by providing clinical information pertinent to patient diagnosis and treatment.

The Nuclear Medicine Certificate program is a full-time program. Admission is limited to those who meet the specific admissions criteria. The certificate program begins each fall semester and ends with the summer semester.

Students will receive clinical education in affiliate hospitals' nuclear medicine departments. Students must provide their own transportation to clinical sites that may include

Charleston, Columbia, Florence, Greenville and Spartanburg. Didactic instruction is given at the Health Science facility located on the Airport Campus.

The Nuclear Medicine Technology program is fully accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology and graduates are eligible to take the ARRT and the NMTCB examinations. Visit <https://www.midland-stech.edu/programs-and-courses/health-care/nuclear-medicine-technology> for more information.

### **Special Requirements**

#### ***Interview Eligibility Criteria:***

In addition to general Health Sciences Program requirements, specific requirements for attaining interview eligibility status for the NMT program include:

Bachelor's Degree, with MTC's prerequisites for Associate in Applied Science in General Technology (AAS-GEN-NMT), with a cumulative  $\geq 2.75$ .

OR

Associate Degree, with MTC's prerequisites for Associate in Applied Science in General Technology (AAS-GEN-NMT), with a cumulative  $\geq 2.75$ . OR

OR

AAS degree in progress, with MTC's prerequisites for Associate in Applied Science in General Technology/Health Care (AAS.GEN.NMT), with a cumulative  $\geq 2.75$ .

### **PRE-REQUISITE GENERAL EDUCATION COURSES:**

		<u><b>Credit Hours</b></u>
AHS 102	Medical Terminology (O)	3.0
BIO 210	Anatomy and Physiology I (V)	4.0
BIO 211	Anatomy and Physiology II (V)	4.0
NMT 100	Preparation for Clinic	6.0
CHM 110	College Chemistry I (V)	
OR		
CHM 105	General Organic and Biochemistry (V)	4.0
ENG 160	Technical Communications (O, V)	3.0
MAT 110	College Algebra (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
RAD 104	Introduction to Physics or	1.0
PHY 201	Physics I (V)	4.0
PHI 115	Contemporary Moral Issues (O, V)	3.0
<b>Total Credit Hours:</b>		<u>34.0 or 38</u>

#### ***Admission Criteria:***

- > Attend and complete an information session
- > Attend two mandatory clinical observations
- > Successfully complete formal interview
- > Complete all pre-requisites and all coursework within the required AAS.GEN.NMT degrees, as assigned by the nuclear medicine technology faculty and/or health science advisor. Each course must be completed with at least a "C." An overall GPA of 2.75 must be maintained in the prescribed coursework. No prerequisite AAS.

GEN.NMT course may be repeated more than once; no more than two courses may be repeated.

**Clinical Requirements:**

Students are accepted contingent upon successful completion of the health form, criminal background investigation and drug screening.

Students must present BLS CPR certification (adult, infant and child) and first-aid certification cards at the time of advisement before entering their first nuclear medicine course. The CPR certification must be kept current while in the program.

Students who are not certified radiologic technologists will be required to complete NMT 100 (Preparation for Clinical) during the summer semester prior to beginning professional courses.

In order to graduate from the NMT program, students must complete each course with at least a "C." No courses having an NMT prefix may be repeated.

**MAJOR: NUCLEAR MEDICINE**

**CERTIFICATE: NUCLEAR MEDICINE (39 CREDIT HOURS)**

		<u>Credit Hours</u>
NMT 101	Introduction to Nuclear Medicine	2.0
NMT 102	Nuclear Medicine Procedures I	2.0
NMT 103	Nuclear Medicine Physics	2.0
NMT 104	Nuclear Medicine Procedures II	2.0
NMT 105	Quality Assurance Methodology	2.0
NMT 106	Nuclear Medicine Procedures III	2.0
NMT 107	Nuclear Medicine Instrumentation	3.0
NMT 109	Special Topics in Nuclear Medicine	2.0
NMT 150	Applied Nuclear Medicine I	8.0
NMT 151	Applied Nuclear Medicine II	8.0
NMT 152	Applied Nuclear Medicine III	<u>6.0</u>
<b>Total Credit Hours:</b>		39.0

**RECOMMENDED ADDITIONAL COURSES:**

		<u>Credit Hours</u>
AHS 117	Care of the Patient	4.0
AHS 127	Basic Patient Care	3.0
AHS 131	Computers in Healthcare (O, H)	3.0
AHS 141	Phlebotomy	3.0
AHS 145	Electrocardiography	2.0
AHS 156	Electrocardiography Practicum	1.0

**NURSING PROGRAMS**

Nursing career pathway offers two certificate programs; certified nurse assistant and pre-nursing. The licensure programs in Nursing include the Practical Nurse (PN) and Registered Nurse (RN). Students enter the programs in the fall, spring and summer as

cohorts that learn, study, and support each other. Expert nursing faculty guides the cohorts in classroom, simulation and clinical experiences to prepare the student to become licensed nurses who provide safe, quality nursing care. The program emphasizes the value of a diverse student population that reflects the cultural diversity of health care clients. Both practical nursing and associate degree programs are accredited by the Accreditation Commission for Education in Nursing, (3343 Peachtree Road, NE, Suite 850, Atlanta, Georgia 30326, 404-975-5000) and approved by the South Carolina Board of Nursing. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/registered-nurse-adn> for more information.

A flexible schedule is required and will be defined by the college/clinical agencies' needs. The schedule will include different shifts (day or evening) and weekends.

### **Program Accreditation:**

South Carolina Department of Labor, Licensing and Regulation, State Board of Nursing for South Carolina, Synergy Business Park, Kingtree Building, 110 Centerview Dr., Suite 202, Columbia, SC 29210, (803) 898-4550.

Accreditation Commission for Education in Nursing, Inc. (ACEN), 3343 Peachtree Road, NE, Suite 850, Atlanta, Georgia 30326, (404) 975-5000

Upon completion of the program, the graduate is eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

### **Entrance Requirements:**

In addition to the college's admission requirement, specific admission criteria to the Associate Degree Nursing Program includes:

SAT Minimum 500 Reading and 580 Math (No more than 3 years old)

OR

ACT Minimum score of 20 English and 24 Math (No more than 3 years old).

OR

Completion of an associate degree, baccalaureate or higher degree from an accredited school with a minimum grade point average of 2.75 AND completion of pre-requisites for the ADN or PN nursing program maintain a 2.75 grade point average.

OR

Completion of the Pre-Nursing Certificate. The following criteria is required to qualify for the nursing program using the pre-nursing certificate:

- > Must obtain a cumulative minimum grade point average of 2.75 on pre-nursing courses.
- > Must obtain a grade of "C" or better in each course
- > Must NOT repeat any course in the curriculum more than once
- > Must NOT repeat more than 2 pre-nursing courses
- > A "W" (withdrawal) counts as an attempt or a repeat with the exception of "Ws" awarded in Spring, Summer, and Fall 2020 and Spring and Summer 2021. Due to COVID-19, "Ws" awarded during these semesters WILL NOT count as an attempt NOR count against students in future semesters.

## **Additional Requirements**

### Part I

Once above criteria has been met the student will

- > Submit an online Nursing Department Application
- > If qualified, submit a Merit Application
- > Receive an Invitation to attend Nursing Orientation - Part I
- > Attend Part I Nursing Orientation
- > To reserve a seat in the nursing program student must pay a \$100 non-refundable deposit.
- > Nursing department will notify of the admission start date

The following general education courses are required with NUR courses or before entering NUR 134 or NUR 201. A grade of "C" or higher is required.

ENG 101, MAT 120, PSY 201, PSY 203, \*BIO 210, \*BIO 211, \*BIO 225

\* All BIO courses must be completed within five years of entering the nursing program.

### Part II

- > Qualified applicants will complete and submit health physical requirement, required immunizations, CPR certification, drug screen, and a criminal background check is required before Part II Orientation.
- > Attend Part II Orientation
- > Begin nursing program.

Applicants must have and maintain a cumulative 2.0 GPA for all Midlands Technical College course work for progression through the nursing curriculum.

Students in the pre-nursing certificate, prior to Fall of 2020, will remain in the AAS.GEN.ACC3 until the pre-nursing certificate is completed. Once the pre-nursing certificate has been completed, students will receive a change of Major to AAS.GEN.HLC3. Pre-nursing students, effective Fall 2020, will be in the AAS.GEN.HLC3 Major.

The *Nursing Student Handbook* outlines other policies relevant to students in the program.

## **Special Requirements**

Students who have been accepted into the college and waiting for acceptance into the nursing program will be considered Pre-Nursing.

Students are required to take and pass the comprehensive competency exams each semester while in the nursing program and at the end of the nursing program. If the student is not successful in the comprehensive competency exams, remediation is mandatory for progression in the nursing program.

A negative drug screen is required for clinical placement experiences. Students may be subject to random drug screens throughout the program.

Criminal background checks are required for clinical placement. Students may be subject to additional criminal background checks based on clinical affiliate requirements.

Any student convicted of a crime or felony must contact the South Carolina Board of Nursing to determine eligibility of taking the NCLEX-RN licensure exam.

Students in nursing courses are required to attend nursing courses and clinical experiences during the weekday, weekends, and evening hours.

### **Progression**

All courses in the curriculum must be passed with a grade of “C” or better. Courses may be repeated only once to obtain a grade of “C” or better. Students must pass math competency tests throughout the program. Students must have satisfactory clinical performance in every clinical nursing course.

To progress in the curriculum, the student must meet the specified academic performance standards set forth below:

- > Obtain the program grade point average (GPA) required by the Nursing Department, not to drop below a 2.0.
- > Obtain a grade of “C” or better in each course.
- > Repeat no course in the ADN curriculum more than once (NUR and general education courses) with the exception of NUR 131.
- > Repeat no more than 2 curriculum courses (NUR only) within the ADN program with the exception of NUR 131.
- > For NUR 131: two failing grades (grade of D, F, W, or WF) will result in termination from the nursing program.
- > A withdrawal (W) awarded since spring 2018 counts as an attempt or a repeat.
- > Grades below a “C” and withdrawals that appear on transcripts from other institutions will be counted as an attempt or a repeat. This applies if both attempts exist from other institutions, or if one attempt is from another institution and one attempt is from Midlands Technical College.

Students who withdraw from or receive a grade lower than a “C” in any clinical nursing course must seek readmission to the program in order to repeat the course. A student may be readmitted on a space available basis and a cumulative GPA of 2.0 prior to having failed the course.

Attempts include W, WF, D, and F. Readmission is based on space availability and eligibility. The dropped, withdrawn or failed course must be successfully completed before the student can take another nursing course.

Students who have not completed a nursing clinical course within the last nine months are required to validate knowledge for previously completed clinical nursing courses.

CPR certification and TB skin testing must be kept current in order to remain in the program.

The *Nursing Student Handbook* further outlines progression policies in the nursing program.

\*\* Requirements above exclude the Nursing Assistant Certificate

## **NURSING ASSISTANT CERTIFICATE**

The Nursing Assistant certificate will provide a foundation in health care careers, communication, soft skills, computers, and anatomy and physiology. Students will develop basic nursing skills required of nursing assistants in skilled health care settings, such as activity of daily living, vital signs, eating, elimination, and safety measures. Instructional methods will be varied including classroom, online/hybrid, simulation/virtual reality, and clinical rotations. Skills taught in this program are those listed as required for the National Nurse Aide Assessment Program (NNAAP) Examination. Successful completion of this exam, along with listing on the South Carolina Nurse Aide Registry is required to work as a Certified Nursing Aide in South Carolina. The Nursing Assistant Certificate will be the foundation of stackable, short-term, entry-level certificates in the health care arena.

Employment opportunities in South Carolina include positions in places such as hospitals, skilled nursing home facilities, long-term care facilities, hospice and home health care. Related careers include patient care technicians, personal care aides and rehabilitation aides/assistants.

### **Special Requirements**

Students must receive a grade of “C” or better on all Nursing Assistant certificate courses. Students must pass a final comprehensive exit examination to graduate from the program. Students may not repeat Nursing Assistant certificate courses more than once, nor may they progress to the next semester until that course is passed. Students may repeat only two Nursing Assisting courses.

Students will rotate through extended care facilities, hospitals and clinics in the MTC service area for practical experience in Nursing Assisting. Students will be required to comply with regulations required by off-campus clinical sites, which might include finger printing, background checks and drug screenings. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/certified-nursing-assistant-academic-certificate> for more information.

In addition to the college and Health Sciences Department admission requirements, specific interview eligibility criteria for the Nursing Assistant Certificate program include:

### ***Admission Criteria:***

1. Documented attendance at a mandatory orientation session
2. Signed commitment contract
3. Acceptable Criminal Background Check and drug screening results
4. Satisfactory compliance with required medical physical and immunization requirements
5. Current certification in First-Aid and CPR (American Heart for the Health Care Professional)

**MAJOR: NURSING ASSISTANT**

**CERTIFICATE: NURSING ASSISTANT (22 CREDIT HOURS)**

		<u>Credit Hours</u>
AHS 102	Medical Terminology (O)	3.0
AHS 205	Law & Ethics for Health Professions (O, H)	3.0
AHS 131	Computers in Healthcare (O, H)	3.0
AHS 180	Health Careers Preparation (H)	3.0
BIO 110	General Anatomy & Physiology (O)	3.0
ENG 160	Technical Communication (O, V)	3.0
AHS 117	Care of the Patient	<u>4.0</u>
<b>Total Credit Hours:</b>		22.0

## PRE-NURSING CERTIFICATE

The Pre-Nursing certificate provides a structured curriculum for those students seeking to qualify for Nursing without testing using the SAT or ACT and who do not have a prior degree. In order to use the Pre-Nursing Certificate to qualify for the Nursing Department admission process, the student must meet the specified academic performance standards set forth below:

Visit [www.midlandstech.edu/programs-and-courses/health-care/pre-nursing](http://www.midlandstech.edu/programs-and-courses/health-care/pre-nursing) for more information.

### **Graduation**

Students who complete the Pre-Nursing Certificate, meeting the established criteria for academic success must apply for graduation from the Pre-Nursing Certificate program to become eligible for the designated nursing program: Practical Nursing or Associate Degree Nursing. Completion of the certificate does not guarantee admission into the program.

**MAJOR: PRE-NURSING CERTIFICATE (23-24 CREDIT HOURS)**

**CERTIFICATE: PRE-NURSING**

**GENERAL EDUCATION COURSE REQUIREMENTS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
MAT 102	Intermediate Algebra (O, V)	3.0
	OR	
MAT 120	Probability and Statistics (O, V)	3.0
PSY 201	General Psychology (O, V)	<u>9.0</u>

**MAJOR COURSE REQUIREMENTS (11 CREDIT HOURS)**

		<u>Credit Hours</u>
NUR 115	Basic Concepts in Nursing	2.0
BIO 210	Anatomy and Physiology I (V)	4.0
BIO 211	Anatomy and Physiology (V)	4.0
COL 106	Skills for College (O)	<u>1.0</u>
		11.0

## ADDITIONAL COURSE REQUIREMENTS/ELECTIVE (3 OR 4 CREDITS)

Recommended options below; Choose 1:

		<u>Credit Hours</u>
BIO 112	Basic Anatomy and Physiology (V)	3.0-4.0
AHS 102	Medical Terminology (O)	
AHS 117	Care of Patient	
AHS 205	Ethics and Law Allied Health Professions (H, O)	
BIO 225	Microbiology (V)	
PHIL 106	Logic II Inductive Reasoning (O)	
CPT 101	Introduction to Computers (O, H, V)	

## NURSING (ADN)

The Associate Degree Nursing (ADN) program is designed to incorporate biological and social sciences with nursing concepts; knowledge, skills and attributes to demonstrate nursing judgement in caring for patients in a variety of clinical settings. The ADN is able to function with greater independence, in situations that are more complex and with more acutely ill patients. The ADN serves a vital role in teaching the patient about his or her condition and ways to improve his or her health. The ADN assesses the patient's condition, develops the plan of care and makes ongoing judgments regarding the patient's progress. Associate degree nurses have supervisory responsibilities for licensed practical nurses, nursing assistants and other health care workers. The curriculum includes classroom instruction as well as practice in simulated laboratories and various clinical settings. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/registered-nurse-adn> for more information.

**MAJOR: NURSING (68 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (20 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
MAT 120	Probability and Statistics (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
BIO 210	Anatomy and Physiology I (V)	4.0
BIO 211	Anatomy and Physiology II (V)	4.0
	Humanities Elective	<u>3.0</u>
	Subtotal	20.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

## B. MAJOR COURSE REQUIREMENTS (19 CREDIT HOURS)

		<u>Credit Hours</u>
NUR 134	Beginning Nursing Skills	5.0
NUR 162	Psychiatric and Mental Health Nursing	3.0
NUR 155	Contemporary Nursing Practice I	6.0
NUR 235	Contemporary Medical Surgical Nursing Concepts	5.0
	Subtotal	<u>19.0</u>

## C. ADDITIONAL COURSE REQUIREMENTS (29 CREDIT HOURS)

		<u>Credit Hours</u>
BIO 225	Microbiology (V)	4.0
NUR 131	Introduction to Pharmacology	1.0
NUR 141	Pharmacological Therapies I	2.0
NUR 158	Health Promotion for Families I	4.0
NUR 208	Health Promotion for Families II	4.0
NUR 255	Contemporary Nursing Practice II	5.0
NUR 270	Principles of Management and Leadership	1.0
NUR 215	Management of Care	5.0
PSY 203	Human Growth and Development (O, V)	3.0
	Subtotal	<u>29.0</u>

**Total Credit Hours:** 68.0

### Advanced Placement- Transition Nursing: LPN to ADN

Licensed Practical Nurses seeking advanced placement in the ADN program may be admitted to the Transition Nursing Program. LPNs seeking advanced placement must meet the following admission requirements:

- > Have an active unrestricted S.C. Practical Nursing license or compact (multi-state) Practical Nursing license.
- > Graduated from a Practical Nursing Program accredited by ACEN (Accreditation Commission for Education in Nursing).
- > Qualify for the nursing program based on the requirements at the time of applying.
- > Take the PN Comprehensive Predictor Exam.

\*Click here for more information on the website.

The *Nursing Student Handbook* outlines other policies relevant to students in the program.

## MAJOR: TRANSITION NURSING: LPN TO ADN (50 CREDIT HOURS)

### A. GENERAL EDUCATION COURSE REQUIREMENTS (27 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
MAT 120	Probability and Statistics (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
PSY 203	Human Growth and Development (O, V)	3.0
BIO 210	Anatomy and Physiology I (V)	4.0
BIO 211	Anatomy and Physiology II (V)	4.0

BIO 225	Microbiology (V)	4.0
	Humanities Elective	3.0
		<u>27.0</u>

### MAJOR COURSE REQUIREMENTS (7 CREDIT HOURS)

		<u>Credit Hours</u>
NUR 162	Psychiatric and Mental Health Nursing	3.0
NUR 203	Transition for the LPN	1.0
NUR 201	Transition Nursing	3.0
		<u>7.0</u>

### ADDITIONAL COURSE REQUIREMENTS (17 CREDIT HOURS)

		<u>Credit Hours</u>
NUR 131	Introduction to Pharmacology	1.0
NUR 208	Health Promotion for Families II	4.0
NUR 215	Management of Patient Care	5.0
NUR 255	Contemporary Nursing Practice II	5.0
NUR 270	Principles of Management and Leadership	1.0
		<u>16.0</u>
	<b>Total Credits:</b>	50.0

## PRACTICAL NURSING (PN)

The Practical Nursing program is designed to help students develop basic nursing skills in medical, surgical, obstetrical and pediatric nursing. The role of the practical nurse focuses on the technical skills, general knowledge and judgment necessary to organize and provide caring interventions to patients with commonly occurring medical conditions. The practical nurse participates in health promotion/maintenance activities for the individual in the context of the family. The practical nurse is prepared to provide nursing care within the scope of practice defined by the South Carolina Board of Nursing under the direct supervision of the registered nurse and/or other health care provider. The course of study balances classroom instruction with relevant clinical experience and provides the opportunity for students to gain the knowledge and skills necessary to become effective practitioners of practical nursing. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/practical-nursing-lpn> for more information.

The *Nursing Student Handbook* further outlines progression policies in the nursing program.

**MAJOR: NURSING (44 CREDIT HOURS)**

**DIPLOMA: APPLIED SCIENCE**

### A. GENERAL EDUCATION COURSE REQUIREMENTS (9 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
MAT 102	Intermediate Algebra (O, V)	

OR		
MAT 120	Probability and Statistics (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
	Subtotal	9.0

## B. MAJOR COURSE REQUIREMENTS (19 CREDIT HOURS)

		<u>Credit Hours</u>
NUR 134	Beginning Nursing Skills	5.0
NUR 155	Contemporary Nursing Practice I	6.0
NUR 235	Contemporary Medical Surgical Nursing Concepts	5.0
PSY 203	Human Growth and Development (O, V)	3.0
	Subtotal	19.0

## C. ADDITIONAL COURSE REQUIREMENTS (16 CREDIT HOURS)

		<u>Credit Hours</u>
BIO 210	Anatomy and Physiology I (V)	4.0
BIO 211	Anatomy and Physiology II (V)	4.0
NUR 141	Pharmacological Therapies I	2.0
NUR 158	Health Promotion for Families I	4.0
NUR 131	Introduction to Pharmacology	1.0
NUR 166	Issues in Practical Nursing	1.0
	Subtotal	16.0
	<b>Total Credit Hours:</b>	<b>44.0</b>

## EMERGENCY MEDICAL TECHNOLOGY (PARAMEDIC)

The goal of the Paramedic Program is to prepare competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains with or without exit points at the Advanced Emergency Medical Technician and/or Emergency Medical Technician, and/or Emergency Medical Responder levels.

The paramedic curriculum meets or exceeds the national standard curriculum for paramedic education and includes classroom, online, and experiential learning to immerse the student in the environment of pre-hospital emergency care. The program covers an array of topics necessary to prepare the student to pass the national registry exam, including: EMS operations, Medical Emergencies, Trauma Emergencies, Medication Administration, Pharmacology, Cardiology, and the psychomotor skills that accompany each topic area.

The Midlands Technical College (MTC) Paramedic program has been issued a Letter of Review by the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP Executive Office). This letter is NOT a CAAHEP accreditation status; it is a status signifying that a program seeking initial accreditation has demonstrated sufficient compliance with the accreditation Standards through the Letter of Review Self Study Report (LSSR) and other documentation. Letter of Review is recognized by the National Registry of Emergency Medical Technicians (NREMT) for eligibility to take the NREMT's Paramedic credentialing examination(s). However, it is NOT a guarantee of eventual accreditation." Visit <https://www.midlandstech.edu/>

programs-and-courses/health-care/emergency-medical-technology-paramedic-0 for more information.

To contact CoAEMSP Executive Office:

8301 Lakeview Parkway  
Suite 111-312  
Rowlett, TX 75088  
214-703-8445  
FAX 214-703-8992  
www.coaemsp.org

In addition to the college and Health Sciences Department admission requirements, all candidates entering the initial Paramedic course must meet the following requirements:

- > High School Diploma or GED
- > Must be 18 years of age by the start of the program
- > Current BLS CPR card
- > Be physically able to perform all the tasks required in the program, and have approved documentation of a health physical
- > Must maintain state and national registry certification as an EMT for the duration of Paramedic courses (EMS 150 and beyond)
- > Placement into Program English and Math or equivalent placement score via college placement exam
- > Complete a Criminal Background Check
- > Interview with Program Staff
- > Satisfactory compliance with required medical, physical, and immunizations.

**MAJOR: EMERGENCY MEDICAL TECHNOLOGY (61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (17 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 106	Skills for College Success (O)	1.0
MAT 155	Contemporary Mathematics (O, V)	3.0
ENG 160	Technical Communications (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
BIO 112	Basic Anatomy and Physiology (V)	4.0
PHI 115	Contemporary Moral Issues (O, V)	3.0
		<u>17.0</u>

**B. MAJOR COURSE REQUIREMENTS (44 CREDIT HOURS)**

EMS 110	Emergency Medical Technician	5.0
EMS 150	Intro To Advanced Care	5.0
EMS 151	Paramedic Clinical I	2.0
EMS 216	Principles of Rescue	4.0
EMS 230	Advanced Emergency Medical Care I	5.0
EMS 231	Paramedic Clinical II	2.0
EMS 232	Paramedic Internship I	2.0

EMS 240	Advanced Emergency Medical Care II	5.0
EMS 242	Paramedic Internship II	2.0
EMS 270	NREMT Review	4.0
EMS 271	Advanced Emergency Operations	4.0
EMS 272	Paramedic Capstone	4.0
		<u>44.0</u>
	<b>Total</b>	61.0

### **C. ADDITIONAL RECOMMENDED COURSES (12 CREDIT HOURS)**

AHS 102	Medical Terminology (O)	3.0
BIO 210*	Anatomy and Physiology (V)	4.0
BIO 211*	Anatomy and Physiology II (V)	4.0

\*BIO 210 and BIO 211 can be taken in place of BIO 112

## **EMERGENCY MEDICAL TECHNOLOGY (PARAMEDIC) CERTIFICATE**

### **CERTIFICATE: EMERGENCY MEDICAL TECHNOLOGY (PARAMEDIC) (39 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
EMS 150	Introduction to Advanced Care	5.0
EMS 151	Paramedical Clinical I	2.0
EMS 216	Principles of Rescue	4.0
EMS 230	Advanced Emergency Medical Care I	5.0
EMS 231	Paramedic Clinical II	2.0
EMS 232	Paramedic Internship I	2.0
EMS 240	Advanced Emergency Medical Care II	5.0
EMS 242	Paramedic Internship II	2.0
EMS 270	NREMT Review	4.0
EMS 271	Advanced Emergency Operations	4.0
EMS 272	Paramedic Capstone	<u>4.0</u>
	<b>Total Credit Hours:</b>	39.0

## **COMMUNITY PHARMACY TECHNICIAN**

The Community Pharmacy Technician Certificate provides pharmacy technician training with an application to community practice. The program teaches students proper pharmacy operations under the supervision of registered pharmacists. The curriculum combines classroom, online and experiential learning with duties carried out by pharmacy technicians in preparing drugs, filling prescriptions, pricing, completing patient profiles, performing drug calculations, maintaining controlled substances inventories and performing other pharmacy-related activities.

Midlands Technical College is accredited for Pharmacy Technician training by the American Society of Health Systems Pharmacists. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/community-pharmacy-technician> for more information.

### Special Requirements

#### Acceptable admissions criteria:

- > Acceptable criminal background check and drug screening results
- > Current CPR certification at time of program entry
- > Completed medical forms and immunization records
- > Preadmissions interview by the Pharmacy Technician Admission Committee
- > High school diploma or equivalent
- > Placement in curriculum level courses

#### Other recommendations:

- > High school or college credits in mathematics/science (algebra, biology, chemistry)
- > Computer skills/keyboarding skills

### CERTIFICATE: COMMUNITY PHARMACY TECHNICIAN (22 CREDIT HOURS)

		<u>Credit Hours</u>
PHM 101	Introduction to Pharmacy (O)	3.0
PHM 110	Pharmacy Practice	4.0
PHM 113	Pharmacy Technician Math (O)	3.0
PHM 114	Therapeutic Agents I (O)	3.0
PHM 124	Therapeutic Agents II (O)	3.0
PHM 152	Pharmacy Technician Practicum I	2.0
PHM 164	Pharmacy Technician Practicum II	<u>4.0</u>
<b>Total Credit Hours:</b>		22.0

### PHLEBOTOMY CERTIFICATE

The Phlebotomy certificate will provide a foundation in health care careers, communication, soft skills, computers, and anatomy and physiology. Students will develop the basic skills necessary to perform phlebotomy procedures utilized in hospital settings, clinical facilities, and physician's offices. Instructional methods will be varied including classroom, lab, online/hybrid, simulation/virtual reality, and clinical rotations, during which students will have comprehensive clinical experiences in medical laboratory specimen collections, transport, storage, and basic test procedures.

The Phlebotomy certificate may be an extension of the Nursing Assistant Certificate and Cardiac Care Technician to earn stackable, short-term, entry-level certificates in the health care arena. Upon completion of this certificate, the student will be eligible to take the American Society of Phlebotomy Technician certification exam. Upon successful completion of this exam, the student will be able to work as a certified phlebotomist.

Employment opportunities in South Carolina include positions in hospitals, medical and diagnostic laboratories, blood donor centers, and doctor's offices. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/phlebotomy-academic-certificate> for more information.

### **Special Requirements**

Students must receive a grade of "C" or better on all Phlebotomy certificate courses. Students must pass a final comprehensive exit examination to graduate from the program. Students may not repeat certificate courses more than once, nor may they progress to the next semester until that course is passed. Students may repeat only two Phlebotomy certificate courses.

Students are required to purchase uniform, name tag and other supplies needed for lab/clinic.

Students will rotate through hospitals, medical and diagnostic laboratories and clinics in the MTC service area for practical experience in Phlebotomy. Students will be required to comply with regulations required by off-campus clinical sites, which might include finger printing, background checks and drug screenings.

In addition to the college and Health Sciences Department admission requirements, specific interview eligibility criteria for the Phlebotomy Certificate program include:

#### **Admission Criteria:**

1. Documented attendance at a mandatory orientation session
2. Acceptable Criminal Background Check and drug screening results
3. Satisfactory compliance with required medical physical and immunization requirements
4. Signed commitment agreement
5. Current certification in First-Aid and CPR (American Heart for the Health Care Professional)

### **CERTIFICATE: PHLEBOTOMY (23 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
ENG 160	Technical Communications (O, V)	3.0
AHS 180	Health Careers Preparation (H)	3.0
AHS 102	Medical Terminology (O)	3.0
AHS 131	Computers in Healthcare (O, H)	3.0
BIO 110	General Anatomy and Physiology (O)	3.0
AHS 141	Phlebotomy for the Health Care Provider	3.0
AHS 205	Ethics and Law for Allied Health Professions (O, H)	3.0
AHS 142	Phlebotomy	<u>2.0</u>
<b>Total Credit Hours:</b>		<b>23.0</b>

## **PHYSICAL THERAPIST ASSISTANT DEGREE PROGRAM**

The Physical Therapist Assistant is a skilled technical health-care worker who administers patient treatment programs under the supervision of a physical therapist. The

assistant works to relieve pain and/or increase function in patients via therapeutic application of heat, cold, light, water, electricity, sound, massage, exercise, gait, and functional activity.

Clinical experience is provided in a variety of settings including hospitals, rehabilitation agencies, schools, private offices, and long-term care facilities.

The Physical Therapist Assistant curriculum is configured sequentially to allow the student to complete the general education courses in a flexible format. During this time, the student can complete not only the academic requirements needed for the associate degree but can also complete the observation requirements and all necessary documentation required prior to interviewing for the technical portion of the degree. Movement into the technical portion is dependent on successful completion of general education coursework and additional specific admissions requirements found below.

The Physical Therapist Assistant program at Midlands Technical College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE). Visit <https://www.midlandstech.edu/programs-and-courses/health-care/physical-therapy-assistant> for more information.

### **Special Requirements**

Specific Interview Eligibility Criteria for to the Physical Therapist Assistant program technical portion include:

- > Attendance of a mandatory Information session, held first Wednesday of every month (except January or holiday);
- > Completion of 20 or more total hours of PT clinic observation (10 of which must be in an acute care hospital setting) and submission of MTC PTA program observation forms with student observation reflection paper;
- > Completion of Pre-Requisite courses with adherence to the Health Sciences “Course Repeat Policy,” “Course Acceptance Timeframe Policy” and earning a cumulative GPA of 2.75 or higher in only the qualified Pre-Requisite courses; and
- > Submission of the required application materials by the due dates published on the program website;

Specific Admission Requirements to the Physical Therapist Assistant program technical portion include:

- > Be a current MTC student, having participated in a student specific PTA advising appointment with assigned adviser;
- > Successful interview by the Physical Therapist Assistant Program Admissions Committee;
- > First-aid and CPR certification;
- > Acceptable criminal background check and drug screening results; and
- > Satisfactory compliance with required medical, physical, and immunizations.

\*Prior to the interview, students are strongly encouraged to prepare by reviewing the website and all printed information regarding the program. Students that do not matriculate into the technical portion due to an unsuccessful interview will not be permitted to re-apply.

## Progression

All Physical Therapist Assistant Pre-Requisite courses must be completed with a “C” or higher in order to progress into the technical portion of the curriculum. No more than two Pre-Requisite courses may be repeated, and no course may be repeated more than once. The repeat policy is applied to coursework taken both at MTC and at other colleges. All PTA program technical portion curriculum courses must be completed with a “C” or higher on the first attempt or the student will not progress further.

## Readmission

Students who withdraw or who are unable to continue due to grades may apply for readmission. Readmission is not guaranteed. Students may re-enter the program only once and must repeat all technical coursework.

**MAJOR: PHYSICAL THERAPIST ASSISTANT (70 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### A. GENERAL EDUCATION COURSE REQUIREMENTS (27 CREDIT HOURS)

<b>SEMESTER 1</b>		<b><u>Credit Hours</u></b>
COL 106	Skills for College Success (O)	1.0
ENG 101	English Composition I (O, H, V)	3.0
PSY 201	General Psychology (O, V)	3.0
BIO 210	Anatomy and Physiology (V)	4.0
PHI 115**	Contemporary Moral Issues (O, V)	3.0
	Subtotal	<u>14.0</u>
<b>SEMESTER 2</b>		
MAT 120	Probability and Statistics (O, V)	3.0
BIO 211	Anatomy and Physiology II (V)	4.0
SPC 205	Public Speaking (O, H, V)	3.0
AHS 102	Medical Terminology (O)	3.0
	Subtotal	<u>13.0</u>

\*Pre-Requisites courses may be taken in the above layout or as chosen by the student.

\*\*While strongly recommended, a different qualified humanities course may be taken to substitute for PHI 115.

### B. MAJOR TECHNICAL PORTION COURSE REQUIREMENTS (43 CREDIT HOURS)

<b>SEMESTER 3 (Fall Semester)</b>		<b><u>Credit Hours</u></b>
PTH 101	Physical Therapy Professional Preparation	2.0
PTH 204	Physical Therapy Functional Anatomy and Application	5.0
<b>SEMESTER 4 (Spring Semester)</b>		
PTH 202	Physical Therapy Modalities	4.0
PTH 206	Therapeutic Procedures	2.0
PTH 221	Pathology I	2.0
PTH 222	Pathology II	2.0
PTH 225	Electrotherapy	2.0

## **SEMESTER 5 (Summer Semester)**

PTH 252	Clinical Practice I	2.0
PTH 226	Therapeutic Exercises	3.0
PTH 244	Rehabilitation	4.0

## **SEMESTER 6 (Fall Semester)**

PTH 253	Clinical Practice II	3.0
PTH 266	Physical Therapy Practicum I	6.0
PTH 276	Physical Therapy Practicum II	6.0
	Subtotal	43.0

**Total Credit Hours:** 70.0

\*The technical portion of the PTA program courses are offered in the sequence as listed above and can only be taken after acceptance into the technical portion of the PTA program, which follows the Interview and an offer of admittance.

## **PRE-OCCUPATIONAL THERAPY ASSISTANT CERTIFICATE**

### **(COOPERATIVE PROGRAM)**

Occupational Therapy's purpose is to promote improvement of health and self-sufficiency. The field involves evaluating patients' abilities and disabilities and establishing goals and methods of treatment. Treatment methods include light handicrafts, sports, vocational skills and training to overcome specific disabilities. Typical activities include helping a patient with a disability find activities that encourage growth and development, helping a patient with a neurological handicap overcome poor coordination and communication, or helping a senior citizen adjust to the special problems of aging and maintaining optimum physical function.

Midlands Technical College works cooperatively with Greenville Technical College (GTC) to offer the first year of the two-year GTC associate degree program. Students must make direct application to Greenville Technical College to complete their degree requirements. Completion of Phase I does not guarantee admission to Phase II.

### **Special Requirements**

In addition to the college and Health Sciences Department admission requirements, specific admissions criteria to the Pre-Occupational Therapy Assistant program include:

Acceptable admission criteria:

- > TEAS V (Sept 2014-Present): Composite 60 (reading 70, mathematics 68, science 47) and placement into ENG 101; or
- > SAT 910 (minimum critical reading 430) valid through 3//2019; and placement into ENG 101; or
- > SAT 990, EBRW-470, and placement into ENG 101; or
- > ACT 19 (minimum verbal 18, mathematics 23) and placement into ENG 101; or
- > Successful completion of the Pre-Health Care Certificate with a 2.5 GPA and a "C" or higher in each course; or
- > An Associate degree or higher.

Visit <https://www.midlandstech.edu/programs-and-courses/health-care/pre-occupational-therapy-assistant> for more information.

Admission to the first phase of the program at Midlands Technical College does not guarantee admission to the second phase at Greenville Technical College. Selection for admission for the limited positions held for Midlands Technical College students is based on weighted admission score ranking within the MTC cohort completing Phase I and meeting the Greenville Technical College application deadlines.

Interested students should review admission information for the OTA Program on the Greenville Technical College website.

**MAJOR: PRE-OCCUPATIONAL THERAPY ASSISTANT**

**CERTIFICATE: PRE-OCCUPATIONAL THERAPY ASSISTANT  
(35 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
AHS 102	Medical Terminology (O)**	3.0
PSY 201	General Psychology (O, V)	3.0
BIO 210	Anatomy and Physiology I (V)**	4.0
BIO 211	Anatomy and Physiology II (V)**	4.0
MAT 120	Probability and Statistics (O, V) or	3.0
MAT 110	College Algebra (O, V)	
PSY 212	Abnormal Psychology	3.0
PSY 203	Human Growth and Development (O, V)	3.0
SPC 205	Public Speaking (O, H, V) or	3.0
SPC 209	Interpersonal Communications	3.0
	*Approved Humanities Elective	<u>3.0</u>
	<b>Total Credit Hours:</b>	<b>35.0</b>

\*\* Course should not be taken until the student has an approximate date for program entry. This course is valid for 3-5 years, depending on the grade earned - (See Health Sciences admission requirements)

\*RECOMMENDED HUMANITIES: Ethics or Philosophy are recommended humanities; however, any college transferable humanities will be accepted.

For more information and programmatic advisement, interested students should contact the Midlands Technical College Health Sciences Advisor/Retention Advocate who is the liaison for this program with Greenville Technical College.

## **RADIOLOGIC TECHNOLOGY DEGREE PROGRAM**

Radiographers (X-ray technologists) assist radiologists (MDs) in performing examinations of the body to rule out or confirm and identify fractures or disease. To accomplish this, radiographers must be well-trained in using highly technical X-ray equipment and applying specialized techniques. Radiographers study human anatomy and physiology,

pathology, exposure techniques, positioning, fluoroscopic procedures, radiation protection, trauma and mobile radiography. Elective topics in radiation therapy, ultrasound, C.T. and MRI are also provided.

The Radiologic Technology program is fully accredited by the Joint Review Committee on Education in Radiologic Technology and by the S.C. Radiation Quality Standards Association. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/radiologic-technology> for more information.

Graduates are eligible to take the ARRT examination. Upon successful completion, students receive the designation of Registered Radiologic Technologist RT(R).

Required rotations through various hospitals, offices, trauma centers and immediate care areas of radiology are scheduled for certain days. Evenings and weekends are scheduled by the program to enhance their clinical education experience. These rotations are required.

### **Special Requirements**

Students are required to purchase and maintain a set of standard white royal blue uniforms, laboratory coats, white shoes and a name pin (approximate cost of \$450), radiography books and manuals (approximate cost of \$1100) and membership fees in professional organizations (approximate cost of \$35).

In addition to the college and Health Sciences Department admission requirements, specific eligibility and admissions criteria to the Radiologic Technology program are:

#### ***Pre-application considerations:***

- > High school diploma or equivalent
- > High school or college credits in mathematics/science (recommended)
- > Completion of pre-requisite courses

#### ***Pre-Interview Requirements - Maintaining Eligibility:***

- > Attend information session.
- > Complete two clinical observations.
- > Students must earn a grade of "C" or higher in all math, science, and technology courses. No course may be repeated more than once.
- > Student must maintain 2.5 GPA in the RAD general education courses.

#### ***Acceptable admission criteria:***

- > Compliance with the program's dress code and personal appearance policies found in the program's website at (The Program Policy and Procedure Manual can be reviewed at the library at either the Airport Campus or the Beltline Campus or online on our website).
- > Successful formal interview following an information session and observations.
- > Satisfactory compliance with required medical physical and immunization requirements.
- > Acceptable criminal background check and drug screening results.

### **Merit Admissions**

A merit admission opportunity is available for certain highly qualified applicants 1st attempt which will permit interviewing in advance of the chronologically determined

interview eligibility date. Information about merit admission and program information can be found on the program's web site.

**MAJOR: RADIOLOGIC TECHNOLOGY (74 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (17 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 106	Skills for College Success (O)	1.0
AHS 102	Medical Terminology (O)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
BIO 210	Anatomy and Physiology I (V)	4.0
PHI 115	Contemporary Moral Issues (O, V)	<u>3.0</u>
	Subtotal	17.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

**B. MAJOR COURSE REQUIREMENTS (57 CREDIT HOURS)**

		<u>Credit Hours</u>
RAD 101	Introduction to Radiography	2.0
RAD 102	Patient Care Procedures	2.0
RAD 153	Applied Radiography I	3.0
BIO 211	Anatomy and Physiology II (V)	4.0
ENG 160	Technical Communications (O, V)	<u>3.0</u>
	Subtotal	14.0
RAD 130	Radiographic Procedures I	3.0
RAD 110	Radiographic Imaging I	3.0
RAD 155	Applied Radiography II	5.0
RAD 235	Radiography Seminar I	<u>1.0</u>
	Subtotal	12.0
RAD 136	Radiographic Procedures II	3.0
RAD 165	Applied Radiography III	<u>5.0</u>
	Subtotal	8.0
RAD 121	Radiographic Physics	4.0
RAD 258	Advanced Radiography I	<u>8.0</u>
	Subtotal	12.0
RAD 220	Selected Imaging Topics	3.0
RAD 268	Advanced Radiography II	<u>8.0</u>
	Subtotal	11.0
	<b>Total Credit Hours:</b>	74.0

Students must earn a grade of "C" or higher in all math, science and technology courses. No course may be repeated more than once, no radiology course may be repeated.

## **ADVANCED CERTIFICATION IN CARDIAC AND VASCULAR INTERVENTIONAL RADIOLOGY** (Pending Approval)

This program provides academic and clinic training to credentialed radiologic technologists seeking to expand into cardiac interventional or vascular interventional radiology procedures and prepares students with the knowledge needed to pass the credentialing examination. Technologists can work directly with a cardiologist or radiologist in life-saving procedures.

Students must be credentialed radiologic technologists before they enter this program. They will need to pass two credentialing exams at the end of the program to work in this advanced and specialized area.

**MAJOR:           ADVANCED CERTIFICATION IN CARDIAC AND VASCULAR  
INTERVENTIONAL RADIOLOGY**

**CERTIFICATE: ADVANCED CERTIFICATION IN CARDIAC AND VASCULAR  
INTERVENTIONAL RADIOLOGY (25 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
RAD 114	Radiographic Imaging Fundamentals II	2.0
RAD 205	Radiographic Pathology	2.0
RAD 210	Radiographic Imaging III	3.0
RAD 230	Radiographic Procedures III	3.0
RAD 236	Radiography Seminar II	2.0
RAD 256	Advanced Radiography I	6.0
RAD 257	Advanced Radiography II	<u>7.0</u>
<b>Total Credit Hours:</b>		25.0

## **RESPIRATORY CARE DEGREE PROGRAM**

Respiratory Care is a health specialty relating to the diagnosis, treatment, preventive and rehabilitative care of individuals suffering from deficiencies, diseases, trauma, and abnormalities affecting the process of breathing. They are trained to be members of the highly technical life support teams, patient educators and rehabilitation specialists. The Respiratory Care curriculum has a variety of program options sequenced to offer the student the greatest flexibility in achieving their career goals. Students may at any time complete pre-requisite courses which includes all the general education and related courses (English, math, anatomy and physiology, integrated science, etc.) required by the curriculum. The student can take all or part of these courses prior to taking the professional courses. The student determines the length of time they want to spend in this phase before applying for the next phase (Phase II).

Clinical Phase may be started only in the fall semester and completes the technical or professional training. Here, students study respiratory care procedures and concepts in class, laboratory and clinical facilities. The curriculum blends classroom, laboratory and hospital experience. Much of the time is spent in supervised patient-care learning

while working with physicians, nurses, respiratory therapists and other members of the health care team at clinical sites.

The Respiratory Care program is accredited by Commission on Accreditation for Respiratory Care (CoARC).

Students graduating from the Respiratory Care program are eligible to take the National Board Respiratory Care (NBRC) Therapist Multiple Choice Examination and the Clinical Simulation Examination given by the NBRC. Upon successful completion of these registry examinations, graduates are designated as Registered Respiratory Therapists. Graduates from the program are eligible to apply to the South Carolina State Board of Medical Examiners for state licensing. Visit <https://www.midlandstech.edu/programs-and-courses/health-care/respiratory-care> for more information.

### **Special Requirements**

Students in the program are required to purchase and maintain two monogrammed uniforms, two lab coats, white shoes, stethoscope and a watch at an approximate cost of \$225.

Students are required to join the professional association (AARC) at the student rate of \$50 and attend some workshops and scheduled professional meetings at their own expense (approximately \$150/year).

Students must earn at least a “B” in BIO 112 on the first attempt. Students must attain a grade of at least a “C” in all other respiratory care, mathematics and science courses to successfully complete the program. Students may not repeat mathematics, science and/or major courses more than once and are permitted to repeat no more than two different curriculum courses.

In addition to the college and Health Sciences Department admission requirements, specific eligibility and admissions criteria to the Respiratory Care program are:

#### ***Acceptable admissions criteria:***

- > Respiratory care information session and hospital observation as notified by the Admissions Office.
- > Successful program interview scheduled after completion of the hospital observation.
- > Health form completed and turned in prior to start of first semester of classes.
- > Acceptable criminal background check and drug screening results.
- > First aid and CPR Certificates - A Community and Basic Life Support CPR for Adults and Children certificate from the American Red Cross or Heart Association is due before entry into the first respiratory class and must be current (within 3 months of starting the program).
- > Satisfactory compliance with required medical, physical, and immunizations.

Individual evaluations may be given to applicants who do not meet all of the above criteria. Students must have a clinical observation before being interviewed.

### **Merit Admissions**

A merit admission opportunity is available for highly qualified applicants. Information can be found on the program website.

**MAJOR: RESPIRATORY CARE (73 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (17 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 106	Skills for College Success (O)	1.0
ENG 101	English Composition I (O, H, V)	3.0
BIO 112	Basic Anatomy and Physiology (V)	4.0
MAT 102	Intermediate Algebra (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	<u>3.0</u>
	Subtotal	17.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

**B. MAJOR COURSE REQUIREMENTS (56 CREDIT HOURS)**

		<u>Credit Hours</u>
RES 101	Introduction to Respiratory Care	3.0
RES 121	Respiratory Skills I	4.0
RES 246	Respiratory Pharmacology	2.0
RES 160	Clinic	1.0
PHS 115	Integrated Science	<u>4.0</u>
	Subtotal	14.0
RES 125	Cardiopulmonary Physiology	2.0
RES 131	Respiratory Skills II	4.0
RES 244	Advanced Respiratory Skills	4.0
RES 150	Clinical Applications I	<u>4.0</u>
	Subtotal	14.0
RES 110	Cardiopulmonary Science I	2.0
RES 204	Neonatal/Pediatric Care	3.0
RES 152	Clinical Applications II *	<u>3.0</u>
	Subtotal	8.0
RES 235	Respiratory Diagnostics	4.0
RES 241	Respiratory Care Transition	1.0
RES 111	Pathophysiology	2.0
RES 275	Advanced Clinical Practice I	<u>5.0</u>
	Subtotal	12.0
RES 232	Respiratory Therapeutics	2.0
RES 242	Advanced Respiratory Care Transition	1.0
RES 277	Advanced Clinical Practice II	<u>5.0</u>
	Subtotal	8.0
	<b>Total Credit Hours:</b>	73.0

## RECOMMENDED ADDITIONAL COURSES:

AHS 102	Medical Terminology (O)	3.0
AHS 141	Phlebotomy	3.0
AHS 145	Electrocardiography	2.0
AHS 156	Electrocardiography Practicum	1.0
BIO 115	Microbiology (V)	3.0
BIO 210	Anatomy and Physiology I (V)	4.0
BIO 211	Anatomy and Physiology II (V)	4.0
CHM 105	General Organic and Biochemistry (V)	4.0

## SURGICAL TECHNOLOGY

Surgical Technologists are integral members of the operating room team. They work in cooperation with surgeons and other healthcare professionals to deliver safe, direct patient care during all phases of surgery. Surgical Technologists prepare and sterilize instruments and surgical supplies, assist physicians during surgical procedures, ensure necessary equipment is properly maintained and available when needed, handle surgical specimens, maintain a sterile atmosphere in the operating room environment and complete necessary paperwork related to surgical procedures.

The comprehensive Surgical Technology program offers students the opportunity to prepare for entry-level positions as Surgical Technologists. The three-semester curriculum gives students a balanced set of experiences in the classroom, laboratory and clinical setting. Students are trained in procedures, aseptic (sterile) techniques, medical equipment nomenclature, human anatomy and physiology, physics, robotics, and pharmacology for the operating room. Graduates of the program may be employed in a variety of areas such as the operating room, labor and delivery, physicians' offices, cath labs, and outpatient surgery centers.

The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Program (CAAHEP), on the recommendation of the Accreditation Review Committee in Surgical Technology (ARC-ST). Visit <https://www.midlandstech.edu/programs-and-courses/health-care/surgical-technology> for more information.

Graduates of the program are required to sit for the National Certification Examination for Surgical Technologists.

### Special Requirements

Students are required to purchase and maintain blue scrub suits, white shoes, white hose, a name pin and protective eye wear at an approximate cost of \$180.

Students must attain a grade of "C" or better in all required curriculum courses to complete the program successfully. All courses in the curriculum may be repeated no more than once to obtain a grade of "C" or better. No more than two curriculum courses may be repeated. All Surgical Technology courses must be taken in the appropriate sequence.

In addition to the college and Health Sciences Department admission requirements, specific eligibility and admissions criteria to the Surgical Technology program include:

**Acceptable admissions criteria:**

- > Successful interview by the Surgical Technology Admission Committee
- > Must be 17 years of age by date of program entry
- > Certification in Basic First-aid and BLS Infant, Child, Adult CPR
- > Acceptable criminal background check and drug screening results
- > Satisfactory compliance with required medical, physical, and immunizations.

**MAJOR: SURGICAL TECHNOLOGY (49 CREDIT HOURS)****DIPLOMA: APPLIED SCIENCE****A. GENERAL EDUCATION COURSE REQUIREMENTS (17 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 106 Skills for College Success (O)	1.0
ENG 160 Technical Communications (O, V)	3.0
AHS 102 Medical Terminology (O)	3.0
BIO 112 Basic Anatomy and Physiology (V)	4.0
BIO 115 Basic Microbiology (V)	3.0
MAT 155 Contemporary Mathematics (O, V)	3.0
Subtotal	<u>17.0</u>

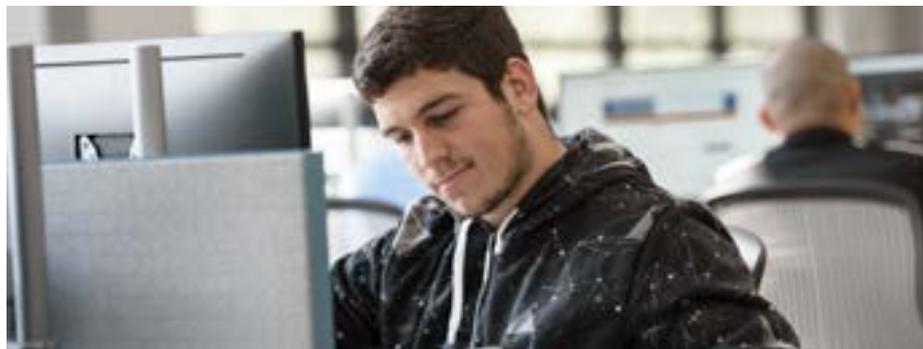
**B. MAJOR COURSE REQUIREMENTS (23 CREDIT HOURS)**

	<u>Credit Hours</u>
SUR 101 Introduction to Surgical Technology	5.0
SUR 103 Surgical Procedures I	4.0
SUR 102 Applied Surgical Technology	5.0
SUR 104 Surgical Procedures II	4.0
SUR 110 Introduction to Surgical Practicum	5.0
Subtotal	<u>23.0</u>

**C. ADDITIONAL COURSE REQUIREMENTS (9 CREDIT HOURS)**

	<u>Credit Hours</u>
SUR 114 Surgical Specialty Practicum	7.0
SUR 120 Surgical Seminar	2.0
Subtotal	<u>9.0</u>
<b>Total Credit Hours:</b>	<b>49.0</b>

# School of Interdisciplinary Studies



MTC's School of Interdisciplinary Studies serves students who need a uniquely customized educational path. As part of the MTC orientation, students consult with an academic and career advisor to identify the School and Pathway that best serves their educational and career goals. The vast majority of MTC students, including most students who want to transfer to a four-year college or university, will follow an established pathway within one of MTC's other schools.

Your advisor may recommend switching to the School of Interdisciplinary Studies to fit your needs if

- > **Your career goals span more than one discipline.** For example, if you are interested in a career as a science illustrator, you might pursue a program of study that includes concentration courses in both biology and art studio.
- > **Your transfer major does not align well with MTC's other schools.** This is not common; most transfer majors at MTC easily fit within the other schools of study.
- > **You transferred to MTC with a large amount of prior coursework from another college that does not align with one of the established pathways within the other schools.**

You will work with your Academic and Career Advisor and the Dean of the School of Interdisciplinary Studies to tailor either an **Associate in Arts** or **Associate in Science** degree to meet your specific academic and career needs.

The School of Interdisciplinary Studies also houses two certificates for specific groups of students:

- > **The General Studies Certificate** is designed to provide dually enrolled high school students with a broad general education foundation to facilitate their transition into higher education institutions.
- > **The Transfer Studies Certificate** is designed for participants in the residential Gamecock Gateway program in partnership with the University of South Carolina. Program participants are required to successfully complete the 30 transferable

credit hours within this certificate with a minimum 2.25 transferable grade point average.

All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).

## **ASSOCIATE IN ARTS**

The Associate in Arts degree is the parent curriculum of many of our transfer concentrations in humanities and social science. The A.A. concentrations serve students who wish to take courses to transfer into a four-year college or university in such majors as business, humanities, social sciences or others that require more intensive course work in the humanities and/or social sciences than in mathematics and science. The two-year degree program is essentially equivalent to the first two years of the degree requirements for the chosen major at the student's four-year college or university. The student's desired transfer institution will be the ultimate authority on course transfer and degree applicability, and the student and advisor can further refine course choices in the degree planning process.

### **Transfer to Other Colleges**

Entrance requirements for transfer students vary widely among colleges and universities. Transfer of credits is a privilege granted by the institution to which the student transfers, and all applicants and requests for transfer of credit are considered individually. Students must complete their courses at Midlands Technical College with grades acceptable to the college to which they request admission and transfer of credit. It is strongly recommended that early in a student's academic career at Midlands Technical College he or she discuss transferring to a four-year institution with the appropriate representatives of that institution.

While it is the responsibility of each student to plan a program of study to meet the requirements of the college to which the student expects to transfer, informed academic advisors are available to assist students in their course selections.

**MAJOR: ASSOCIATE IN ARTS (61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN ARTS**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (28 CREDIT HOURS)**

#### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
	Subtotal	9.0

#### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

	<u>Credit Hours</u>
Fine Arts - 3 credit hours must be selected from the following: ART 101, MUS 105, THE 101 (O)	3.0

Social/Behavioral Science -- 3 credit hours must be selected from the following: ANT 202, ECO 210  
GEO 102, PSC 201, PSY 201, SOC 101 (O) 3.0

History - 3 credit hours must be selected from the following: HIS 101, HIS 102, HIS 104, HIS 105, HIS 201, HIS 202 3.0

Additional Fine Arts/Literature/Humanities/SBS  
Elective: 3 credit hours must be selected from the following:  
ANT 101, ANT 202, ANT 203, ART 101, ART 105, ART 107, ART 108, ART 111, ART 112, ART 121, ART 122, ART 211, ART 212, ART 292, ECO 201, ECO 210, ECO 211, ENG 165, ENG 203, ENG 205, ENG 206, ENG 207, ENG 208, ENG 209, ENG 210, ENG 211, ENG 212, ENG 214, ENG 218, ENG 222, ENG 228, ENG 230, ENG 234, ENG 236, ENG 238, ENG 260, ENG 263FRE 101, FRE 102, FRE 122, GEO 101, GEO 102, GER 101, GER 102, GER 122, HIS 101, HIS 102, HIS 104, HIS 105, HIS 106, HIS 107, HIS 108, HIS 109, HIS 113, HIS 130, HIS 131, HIS 201, HIS 202, HIS 213, HIS 214, HIS 220, HIS 221, HIS 230, HIS 235, LNG 101MUS 105, MUS 110, MUS 115, PHI 101, PHI 115, PSC 201, PSC 205, PSC 206, PSC 215, PSC 220, PSC 225 PSY 201, PSY 203, PSY 212, PSY 218, PSY 220, PSY 225, REL 101, REL 102, REL 103, REL 106, SOC 101, SOC 205, SOC 210, SOC 220, SPA 101, SPA 102, SPA 122, SPC 208, SPC 209, SPC 210, THE 101, THE 105, THE 125, THE 220, THE 221, THE 222, THE 253 3.0  
Subtotal 12.0

### 3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)

#### Credit Hours

Analytical Reasoning:  
MAT 110, MAT 111, MAT 120, MAT 122, MAT 130, MAT 132, MAT 140, MAT 141, MAT 170, MAT 220, MAT 240, MAT 242, MAT 250, MAT 251, PHI 105, PHI 106 3.0

Science:  
AST 101, AST 102, BIO 101, BIO 102, BIO 112, BIO 201, BIO 202, BIO 205/BIO 206, BIO 210, BIO 211, BIO 225, CHM 105, CHM 110, CHM 111, CHM 112, CHM 211, CHM 212, GEO 205, PHY 201, PHY 202, PHY 221, PHY 222 4.0  
Subtotal 6-7.0

**Total General Education Credits:** 28.0

### B. CONCENTRATION COURSE REQUIREMENTS (15 CREDIT HOURS)

#### Credit Hours

15 credit hours must be selected from the following:

ANT 101, ANT 202, ANT 203, ART 101, ART 105,  
 ART 107, ART 108, ART 111, ART 112, ART 121, ART 122  
 ART 211, ART 212, ART 292, ECO 201, ECO 210, ECO 211,  
 ENG 165, ENG 203, ENG 205, ENG 206, ENG 207, ENG 208,  
 ENG 209, ENG 210, ENG 211, ENG 212, ENG 214,  
 ENG 218, ENG 222, ENG 228, ENG 230, ENG 234,  
 ENG 236, ENG 238, ENG 260, ENG 263, ENG 299,  
 FRE 101, FRE 102, FRE 122, GEO 101, GEO 102, GER 101,  
 GER 102, GER 122, HIS 101, HIS 102, HIS 104, HIS 105,  
 HIS 106, HIS 107, HIS 108, HIS 109, HIS 113, HIS 130,  
 HIS 131, HIS 201, HIS 202, HIS 213, HIS 214, HIS 220,  
 HIS 221, HIS 230, HIS 235, LNG 101, MUS 105, MUS 110,  
 MUS 115, PHI 101, PHI 115, PSC 201, PSC 205, PSC 206,  
 PSC 215, PSC 220, PSC 225, PSY 201, PSY 203,  
 PSY 212, PSY 218, PSY 220, PSY 225, REL 101, REL 102,  
 REL 103, REL 106, SOC 101, SOC 205, SOC 210, SOC 220,  
 SPA 101, SPA 102, SPA 122, SPC 208, SPC 209, SPC 210,  
 THE 101, THE 105, THE 125, THE 220, THE 221,  
 THE 222, THE 253

**Total Humanities Credits:** 15.0

### **C. COLLEGE-WIDE ELECTIVES (18 CREDIT HOURS)**

#### **Credit Hours**

Electives depend on students' educational goals and may show wide variety. Students should consult their advisors for appropriate elective courses. Credits may be selected from curriculum courses numbered 101 and above, excluding MAT 101, MAT 102, and AOT 105.

**Total College-Wide Elective Credits:** 18.0

**Total Program Credit Hours:** 61.0

## **ASSOCIATE IN SCIENCE**

The Associate in Science degree is the parent curriculum of many of our transfer concentrations in mathematics and science. The A.S. concentrations serve students who wish to take courses to transfer into a four-year college or university in such majors as computer science, engineering, health sciences, mathematics, science or others that require more intensive course work in mathematics and science than in the humanities and/or social sciences. This two-year degree program is essentially equivalent to the first two years of the degree requirements for the chosen major at the student's four-year college or university.

### **Transfer to Other Colleges**

Entrance requirements for transfer students vary widely among four-year colleges and universities. Transfer of credits is a privilege granted by the institution to which the student transfers, and all applicants and requests for transfer of credit are considered individually. Students must complete their courses at Midlands Technical College with grades acceptable to the college which they request admission and transfer of

credit. It is strongly recommended that early in a student's academic career at Midlands Technical College he or she discuss transferring to a four-year institution with the appropriate representatives of that institution.

While it is the responsibility of each student to plan a program of study to meet the requirements of the college to which the student expects to transfer, informed academic advisors are available to assist students in their course selections.

**MAJOR: ASSOCIATE IN SCIENCE (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (29 CREDIT HOURS)**

**1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	
	OR	
SPC 209	Interpersonal Communication	3.0
Subtotal		<u>9.0</u>

**2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

	<u>Credit Hours</u>
Fine Arts - 3 credit hours must be selected from the following: ART 101, MUS 105, THE 101	3.0
Social/Behavioral Science -- 3 credit hours must be selected from the following: ANT 202, ECO 210 GEO 102, PSC 201, PSY 201, SOC 101	3.0
History - 3 credit hours must be selected from the following: HIS 101, HIS 102, HIS 104, HIS 105, HIS 201, HIS 202	3.0
Additional Fine Arts/Literature/Humanities/SBS Elective: 3 credit hours must be selected from the following: ANT 101, ANT 202, ANT 203, ART 101, ART 105, ART 107, ART 108, ART 111, ART 112, ART 121, ART 122, ART 211, ART 212, ART 292, ECO 201, ECO 210, ECO 211, ENG 165, ENG 203, ENG 205, ENG 206, ENG 207, ENG 208, ENG 209, ENG 210, ENG 211, ENG 212, ENG 214, ENG 218, ENG 222, ENG 228, ENG 230, ENG 234, ENG 236, ENG 238, ENG 260, ENG 263, FRE 101, FRE 102, FRE 122, GEO 101, GEO 102, GER 101, GER 102, GER 122, HIS 101, HIS 102, HIS 104, HIS 105, HIS 106, HIS 107, HIS 108, HIS 109, HIS 113, HIS 130, HIS 131, HIS 201, HIS 202, HIS 213, HIS 214, HIS 220, HIS 221, HIS 230, HIS 235, LNG 101, MUS 105, MUS 110, MUS 115, PHI 101, PHI 115, PSC 201, PSC 205, PSC 206, PSC 215, PSC 220, PSC 225, PSY 201, PSY 203, PSY 212, PSY 218, PSY 220,	

PSY 225, REL 101, REL 102, REL 103, REL 106, SOC 101, SOC 205, SOC 210, SOC 220, SPA 101, SPA 102, SPA 122, SPC 208, SPC 209, SPC 210, THE 101, THE 105, THE 125, THE 220, THE 221, THE 222, THE 253	3.0 <hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 12.0
Subtotal	

### 3. SCIENCE (8 CREDIT HOURS)

	<u>Credit Hours</u>
Science: AST 101, AST 102, BIO 101, BIO 102, BIO 112, BIO 201, BIO 202, BIO 205/BIO 206, BIO 210, BIO 211, BIO 225, CHM 105, CHM 110, CHM 111, CHM 112, CHM 211, CHM 212, GEO 205, PHY 201, PHY 202, PHY 221, PHY 222	8.0 <hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 8.0
Subtotal	
<b>Total General Education Credits:</b>	29.0

### B. MATHEMATICS/SCIENCE CONCENTRATION COURSE REQUIREMENTS (15 CREDIT HOURS)

	<u>Credit Hours</u>
15 credit hours must be selected from the following: AST 101, AST 102, BIO 101, BIO 102, BIO 110, BIO 112, BIO 115, BIO 205/206, BIO 210, BIO 211, BIO 225, BIO 240, CHM 105, CHM 110, CHM 111, CHM 112, CHM 211, CHM 212, GEO 205, MAT 110, MAT 111, MAT 120, MAT 122, MAT 130, MAT 140, MAT 141, MAT 170, MAT 220, MAT 240, MAT 242, MAT 250, MAT 251, PHY 201, PHY 202, PHY 221, PHY 222	15.0 <hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 15.0
<b>Total Mathematics/Science Concentration Credits:</b>	15.0

### C. COLLEGE-WIDE ELECTIVES (16-18 CREDIT HOURS)

	<u>Credit Hours</u>
College-wide electives: Electives depend on students' educational goals and may show wide variety. Students should consult their advisors for appropriate elective courses. Must include one curriculum-level mathematics course if not already taken in concentration requirements. Credits may be selected from curriculum courses numbered 101 and above, excluding MAT 101, MAT 102, and AOT 105.	16.0-18.0 <hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 16.0-18.0
<b>Total College-Wide Elective Credits:</b>	
<b>Total Program Credit Hours:</b>	60.0-62.0

## THE GENERAL STUDIES CERTIFICATE

The General Studies certificate is designed to provide dually enrolled high school students with a broad general education foundation to facilitate their transition into higher education institutions. The certificate includes introductory courses that students may take before deciding on an academic and career pathway.

### **REQUIRED COURSE INFORMATION (15 Credits)**

		<u>Credit Hours</u>
ENG 101	English Composition I	3.0
ENG 102	English Composition II	3.0
MUS 105	Music Appreciation	3.0
PSY 201	Introduction to Psychology	3.0
SOC 101	Introduction to Sociology	<u>3.0</u>
	Subtotal	15.0

### **ELECTIVE COURSE INFORMATION (3 Credits)**

		<u>Credit Hours</u>
<b>Electives (Choose 1)</b>		
ART 101	Art History and Appreciation	
CRJ 101	Introduction to Criminal Justice	
ECD 101	Introduction to Early Childhood Education	
HIS 101	Western Civilization to 1689	
HIS 102	Western Civilization Post-1689	
HIS 201	American History: Discovery to 1877	
HIS 202	American History: 1877 to Present	
THE 101	Introduction to Theatre	<u>3.0</u>
	Subtotal	3.0

## TRANSFER STUDIES CERTIFICATE

The Transfer Studies certificate is designed for participants in the residential Gamecock Gateway program in partnership with the University of South Carolina. Program participants are required to successfully complete the following 32 transferable credit hours with a minimum 2.25 transferable grade point average.

### **REQUIRED COURSE INFORMATION (32 Credits)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
ART 101	Art History and Appreciation (O, V)	3.0
ANT 202	Cultural Anthropology (O, V)	3.0
HIS 101	Western Civilization to 1689 (O, V)	3.0
MAT 110	College Algebra (O, V)	3.0
AST 101	Solar System Astronomy (O)	4.0

SPC 205	Public Speaking (O, H, V)	3.0
CPT 101	Introduction to Computers (O, H, V)	<u>3.0</u>
	Subtotal	29.0

**ELECTIVE COURSE INFORMATION (3 Credits)**

**ADDITIONAL COURSE REQUIREMENT**

One curriculum-level course to be chosen under the guidance of the student's academic advisor for the purpose of meeting an additional requirement of the student's intended transfer major.

**Credit Hours**

		3.0
	Subtotal	<u>3.0</u>
<b>Total Program Credit Hours:</b>		32.0

# School of Science, Information Technology, Engineering, and Math (STEM)



The School of STEM offers students the opportunity to explore courses in Science, Information Technology, Engineering, and Mathematics leading to an associate in sciences degree with a concentration in a STEM discipline or an associate of applied sciences degree or certificate leading to a career in one of these areas.

## Science

### Associate Degree Programs

- Biology
- Chemistry
- Physical Sciences
- Pre-Professional Sciences

## Information Technology

### Associate Degree Programs

- Computer Technology Applications Developer
- Computer Technology Web Developer
- Network Systems Management

### Certificate Programs

- Application Programming
- Cybersecurity Information Assurance
- Database Development
- Networking Specialist
- Routing and Networking Configuration
- Web Design and Maintenance

# Engineering

## Associate Degree Programs

Architectural Engineering Technology  
Civil Engineering Technology  
Electronics Engineering Technology  
Mechanical Engineering Technology  
Engineering 2+2 Transfer Programs  
    Chemical Engineering Concentration  
    Civil Engineering Concentration  
    Computer Engineering Concentration  
    Electrical Engineering Concentration  
    Mechanical Engineering Concentration

## Certificate Programs

Architectural Computer Graphics  
Architectural Design Technology  
Architectural System and Codes  
Chemical Process Technology  
Chemical Technology  
Computer-Aided Design  
Construction Engineering Technology  
Environmental Systems Technology  
Manufacturing Process Technology  
Mechanical Technology Fundamentals  
Structural Technology  
Surveying Fundamentals

# Mathematics

## Associate Degree Program

Mathematics

*All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).*

## **ASSOCIATE OF SCIENCE WITH CONCENTRATION IN BIOLOGY**

The Associate in Science with a concentration in Biology is designed to serve students who wish to take courses to transfer into a four-year college or university that offers a baccalaureate degree with a major in Biology or related fields. This two-year degree program is intended to be equivalent to the first two years of the degree requirements for the chosen major at the student's four-year college or university. The student's desired transfer institution will be the ultimate authority on course transfer and degree applicability, and the student and advisor can further refine course choices in the degree planning process.

Biology is the study of life including structure, growth, reproduction, diversity, and the interactions between organisms and their environment. It applies the systematic scientific method of inquiry, observations, hypothesis, experimentation, and data

analysis before reaching a conclusion. It uses critical thinking skills to solve biological questions. The laboratory hours give students hands-on practice in the concepts and principles introduced in the classroom. Students have the opportunity to use laboratory instrumentation and procedures that will carry over to related scientific fields. A Biology concentration is recommended for students who wish to pursue further studies in Biological Sciences such as Anatomy and Physiology, Zoology, Botany, Microbiology, Genetics, Cell Biology, Environmental Sciences, Marine Biology, and Ecology, among others.

**MAJOR: ASSOCIATE IN SCIENCE (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN SCIENCE WITH CONCENTRATION IN BIOLOGY**

**A. COURSES FOR DISTRIBUTION**

**1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H)	3.0
SPC 205	Public Speaking (O, H)	
OR		
SPC 209	Interpersonal Communication	<u>3.0</u>
	Subtotal	<u>9.0</u>

**2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
PSY 201	General Psychology (O, H, V)	
OR		
SOC 101	Introduction to Sociology (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	
OR		
HIS 101	Western Civilization to 1689 (O)	
OR		
HIS 102	Western Civilization Post 1689 (O, V)	
OR		
HIS 201	American History: Discovery to 1877 (O, V)	3.0
ANT 202	Cultural Anthropology (O, V)	
OR		
ECO 210	Macroeconomics (O, V)	<u>3.0</u>
	Subtotal	<u>12.0</u>

### 3. SCIENCE (8 CREDIT HOURS)

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	4.0
CHM 111	College Chemistry II (V)	4.0
	Subtotal	<u>8.0</u>

### B. COURSES FOR BIOLOGY CONCENTRATION (12 CREDIT HOURS)

		<u>Credit Hours</u>
BIO 101	Biological Science I (V)	4.0
BIO 102	Biological Science II (V)	4.0
BIO 225	Microbiology (V)	
OR		
BIO 210	Anatomy and Physiology I (V)	
OR		
BIO 205/206	Ecology/Ecology Lab (O, V)	4.0
	<b>Total Mathematics/Science Concentration Credits:</b>	<u>12.0</u>

### C. COLLEGE-WIDE ELECTIVES (16-22 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
CHM 211	Organic Chemistry I (V)	4.0
CHM 212	Organic Chemistry II (V)	4.0
COL 101	College Orientation (V)	1.0
	<b>Total College-Wide Elective Credits:</b>	<u>19.0</u>
	<b>Total Program Credit Hours:</b>	60.0

## ASSOCIATE OF SCIENCE WITH CONCENTRATION IN CHEMISTRY

The Associate in Science with a concentration in Chemistry is designed to serve students who wish to take courses to transfer into a four-year college or university that offers a baccalaureate degree with a major in Chemistry. This two-year degree program is intended to be equivalent to the first two years of the degree requirements for the chosen major at the student's four-year college or university. The student's desired transfer institution will be the ultimate authority on course transfer and degree applicability, and the student and advisor can further refine course choices in the degree planning process.

Chemistry is the branch of science that studies the composition, structure, properties, interactions, and reactions of matter, including at the atomic and molecular level. It applies the systematic scientific method of inquiry, observations, hypothesis, experimentation, and data analysis before reaching a conclusion. It uses critical thinking skills to solve chemical problems. The laboratory hours give students hands-on practice in the concepts and principles introduced in the classroom. Students have the

opportunity to use laboratory instrumentation and procedures that will carry over to related scientific fields. A Chemistry concentration is recommended for students who wish to pursue further studies in Chemical Sciences such as Chemical Engineering, Material Sciences, and Forensic Sciences, among others.

**MAJOR: ASSOCIATE IN SCIENCE (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN SCIENCE with Concentration In Chemistry**

**A. COURSES FOR DISTRIBUTION**

**1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H)	3.0
SPC 205	Public Speaking (O, H)	
OR		
SPC 209	Interpersonal Communication	<u>3.0</u>
	Subtotal	9.0

**2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
SOC 101	Introduction to Sociology (O, V)	
OR		
PSY 201	General Psychology (O, H, V)	3.0
HIS 101	Western Civilization to 1689 (O)	
OR		
HIS 102	Western Civilization Post 1689 (O, V)	
OR		
HIS 201	American History: Discovery to 1877 (O, V)	
OR		
HIS 202	American History: 1877 to Present (O, V)	3.0
ECO 210	Macroeconomics (O, V)	
OR		
ANT 202	Cultural Anthropology (O, V)	<u>3.0</u>
	Subtotal	<u>12.0</u>

**3. SCIENCE (8 CREDIT HOURS)**

		<u>Credit Hours</u>
BIO 101	Biological Sciences I (V) OR	
BIO 210	Anatomy and Physiology I (V)	4.0
PHY 201	Physics I (V)	<u>4.0</u>
	Subtotal	<u>8.0</u>

## B. COURSES FOR CHEMISTRY CONCENTRATION (16 CREDIT HOURS)

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	4.0
CHM 111	College Chemistry II (V)	4.0
CHM 211	Organic Chemistry I (V)	4.0
CHM 212	Organic Chemistry II (V)	4.0
<b>Total Mathematics/Science Concentration Credits:</b>		<u>16.0</u>

## C. ADDITIONAL REQUIREMENTS OR ELECTIVES (16-22 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
PHY 202	Physics II (V)	4.0
CPT 101	Introduction to Computers (O, H, V)	3.0
COL 101	College Orientation (V)	1.0
<b>Total College-Wide Elective Credits:</b>		<u>18.0</u>
<b>Total Program Credit Hours:</b>		60.0

## ASSOCIATE OF SCIENCE WITH CONCENTRATION IN PHYSICAL SCIENCES

The Associate in Science with a concentration in Physical Sciences is designed to serve students who wish to take courses to transfer into a four-year college or university that offers a baccalaureate degree with majors in areas such as Physics, Astronomy, Geology, or Meteorology. This two-year degree program is intended to be equivalent to the first two years of the degree requirements for the chosen major at the student's four-year college or university. The student's desired transfer institution will be the ultimate authority on course transfer and degree applicability, and the student and advisor can further refine course choices in the degree planning process.

Physical Science is the study of the non-living, physical world around us, including space. It applies the systematic scientific method of inquiry, observations, hypothesis, experimentation, and data analysis before reaching a conclusion. It uses critical thinking skills to solve questions about the inanimate world around us. The laboratory hours give students hands-on practice in the concepts and principles introduced in the classroom. Students have the opportunity to use laboratory instrumentation and procedures that will carry over to related scientific fields. A Physical Sciences concentration is recommended for students who wish to pursue further studies in Physics, Physics Education, Astronomy, and Meteorology, among others.

**MAJOR: ASSOCIATE IN SCIENCE (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN SCIENCE with Concentration in  
Physical Sciences**

## A. COURSES FOR DISTRIBUTION

### 1. COMMUNICATIONS (9 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H)	3.0
SPC 205	Public Speaking (O, H)	
OR		
SPC 209	Interpersonal Communication	3.0
	Subtotal	<u>9.0</u>

### 2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
OR		
ART 101	Art History and Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
PSY 201	General Psychology (O, H, V)	3.0
HIS 101	Western Civilization to 1689 (O)	3.0
PHI 115	Contemporary Moral Issues (O, V)	3.0
	Subtotal	<u>12.0</u>

### 3. SCIENCE (8 CREDIT HOURS)

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	4.0
PHY 221	University Physics I (V)	4.0
	Subtotal	<u>8.0</u>

## B. COURSES FOR PHYSICAL SCIENCE CONCENTRATION (12 CREDIT HOURS)

		<u>Credit Hours</u>
GEO 205	Physical Geography (H)	4.0
PHY 222	University Physics II (V)	4.0
AST 101	Solar System Astronomy (O, H)	4.0
AST 102	Stellar Astronomy (O, H)	4.0
	<b>Total Mathematics/Science Concentration Credits:</b>	<u>16.0</u>

## C. ADDITIONAL REQUIREMENTS OR ELECTIVES (16-22 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
CPT 101	Introduction to Computer (O, H, V)	3.0

CPT 236	Introduction to Java Programming	3.0
COL 101	College Orientation (O, V)	1.0
<b>Total College-Wide Elective Credits:</b>		<u>17.0</u>
<b>Total Program Credit Hours:</b>		62.0

## **ASSOCIATE OF SCIENCE WITH CONCENTRATION IN PRE-PROFESSIONAL SCIENCES**

The Associate in Science with a concentration in Pre-Professional Sciences is designed to serve students who wish to take courses to transfer into a four-year college or university that offers a baccalaureate degree with a major in Pre-Pharmacy, Pre-Med, Pre-Dental, Pre-Vet, Biology, Chemistry, or Physics. This two-year degree program is intended to be equivalent to the first two years of the degree requirements for the chosen major at the student's four-year college or university. The student's desired transfer institution will be the ultimate authority on course transfer and degree applicability, and the student and advisor can further refine course choices in the degree planning process.

The Pre-Professional Sciences concentration is designed to help students fulfill the requirements for entrance into various undergraduate and graduate-level programs. It applies the systematic scientific method of inquiry, observations, hypothesis, experimentation, and data analysis before reaching a conclusion. The laboratory hours give students hands-on practice in the concepts and principles introduced in the classroom. Students have the opportunity to use laboratory instrumentation and procedures that will carry over to related scientific fields. A Pre-Professional Sciences concentration is recommended for students who wish to pursue further studies in Pharmacy, Physical Therapy, Medicine, Dentistry, Veterinary, and Biology, among others.

**MAJOR: ASSOCIATE IN SCIENCE (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN SCIENCE with Concentration  
In Pre-Professional Sciences**

### **A. COURSES FOR DISTRIBUTION**

#### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H)	3.0
SPC 205	Public Speaking (O, H)	
OR		
SPC 209	Interpersonal Communication	<u>3.0</u>
Subtotal		9.0

#### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
OR		

ART 101	Art History and Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
PSC 201	American Government (O, V)	3.0
HIS 202	American History 1877 to the Present (O, V)	3.0
PHI 115	Contemporary Moral Issues (O, V)	<u>3.0</u>
	Subtotal	12.0

### 3. SCIENCE (8 CREDIT HOURS)

		<b><u>Credit Hours</u></b>
BIO 101	Biological Sciences I (V)	4.0
CHM 110	College Chemistry I (V)	<u>4.0</u>
	Subtotal	8.0

### B. COURSES FOR PRE-PROFESSIONAL SCIENCES (12 CREDIT HOURS)

		<b><u>Credit Hours</u></b>
BIO 102	Biological Sciences II (V)	4.0
CHM 111	College Chemistry II (V)	4.0
CHM 211	Organic Chemistry I (V)	
OR		
PHY 201	Physics I (V)	
OR		
PHY 221	University Physics I (V)	4.0
CHM 212	Organic Chemistry II (V)	
OR		
PHY 202	Physics II (V)	
OR		
PHY 222	University Physics II (V)	<u>4.0</u>
	<b>Total Mathematics/Science Concentration Credits:</b>	<u>16.0</u>

### C. ADDITIONAL REQUIREMENTS OR ELECTIVES (16-22 CREDIT HOURS)

		<b><u>Credit Hours</u></b>
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
MAT 141	Analytical Geometry and Calculus II (V)	
OR		
MAT 120	Probability and Statistics (O, V)	4.0 (3.0)
CPT 114	Computers and Programing	
OR		
IST 225	Internet Communications (O)	3.0
COL 101	College Orientation (V)	<u>1.0</u>
	<b>Total College-Wide Elective Credits:</b>	<u>18.0 (19.0)</u>
	<b>Total Program Credit Hours:</b>	62.0 - 63.0

## INFORMATION SYSTEMS TECHNOLOGY

Information Systems Technology is the study, design, development, implementation, support or management of computer-based information systems, particularly software applications and computer hardware.

All organizations today rely on computer information and networking technology to conduct business and operate more efficiently. Information Systems Technology offers a variety of educational programs designed to prepare students for careers in fields such as application programming, web design, Internet programming, database development, computer networking and cybersecurity.

**Students must earn a grade of “C” or better in all of the courses offered within the Information Systems Technology Department for the grade to be counted toward graduation. Specifically, these include courses with the prefixes CPT and IST.**

### **Associate Degree Programs**

Computer Technology  
Applications Developer  
Computer Technology Web Developer  
Network Systems Management

### **Certificate Programs**

Applications Programming  
Database Development  
Help Desk  
Networking Specialist  
Routing and Networking Configuration  
Web Design and Maintenance

## APPLICATIONS PROGRAMMING CERTIFICATE

The Applications Programming Certificate provides the foundation for students to develop an understanding of coding, designing, testing, and debugging applications in high-level programming languages. Students will be able to code in two high-level languages used in the business environment. Students will be able to develop Windows applications using object-based visual tools. These skills prepare the student for an entry-level position in programming.

**Students must earn a grade of “C” or better in all courses for the grade to be counted toward graduation.**

### **CERTIFICATE: APPLICATIONS PROGRAMMING (22 CREDIT HOURS)**

		<u>Credit Hours</u>
CPT 104	Introduction to Information Technology (O, H)	3.0
CPT 136	Computer Programming Laboratory	1.0
CPT 185	Event-Driven Programming (O)	3.0
CPT 236	Introduction to Java Programming (V)	3.0
CPT 237	Advanced Java Programming	3.0
CPT 244	Data Structures (O)	3.0
IST 225	Internet Communications (O)	3.0
IST 226	Internet Programming	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>22.0</b>

## COMPUTER TECHNOLOGY APPLICATIONS DEVELOPER DEGREE

Computer software is needed to operate and protect computer systems and networks. Programmers write, test, and maintain the detailed instructions that computers must follow to perform their functions. Database administrators determine ways to organize, store, and protect data. The curriculum stresses critical thinking skills and the concepts, principles and techniques of information processing, while providing a background in general education.

**Students must earn a grade of “C” or better in all of the courses offered within the Information Systems Technology Department for the grade to be counted toward graduation. Specifically, these include courses with the prefixes: CPT and IST.**

**MAJOR:           COMPUTER TECHNOLOGY APPLICATIONS DEVELOPER  
                      (62 CREDIT HOURS)**

**DEGREE:        ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 101      College Orientation (V)	1.0
ENG 101      English Composition I (O, H, V)	3.0
ENG 165      Professional Communications (O)	3.0
MAT 110      College Algebra (O, V)	3.0
PSY 201      General Psychology (O, H, V)	3.0
Approved Humanities Course	<u>3.0</u>
Subtotal	<u>16.0</u>

*Major courses meeting other college general education core requirements are starred (\*) below.*

### **B. MAJOR COURSE REQUIREMENTS (34 CREDIT HOURS)**

	<u>Credit Hours</u>
CPT 104      Introduction to Information Technology* (O, H)	3.0
CPT 136      Computer Programming Laboratory	1.0
CPT 185      Event Driven Programming (O)	3.0
CPT 236      Introduction to Java Programming (V)	3.0
CPT 237      Advanced Java Programming	3.0
CPT 242      Database (O, H)	3.0
CPT 244      Data Structures (O, H)	3.0
CPT 247      Unix Operating System (O, H)	3.0
CPT 257      Operating Systems (O)	3.0
CPT 262      Advanced Web Page Publishing	3.0
CPT 264      Systems and Procedures (O)	3.0
CPT 282      Information Systems Security (O)	3.0
IST 225      Internet Communications (O, H)	3.0
IST 226      Internet Programming	3.0

IST 235	Handheld Computer Programming	3.0
IST 272	Relational Database	3.0
	Subtotal	46.0
	<b>Total Credit Hours:</b>	62.0

## **COMPUTER TECHNOLOGY WEB DEVELOPER DEGREE**

The Computer Technology Degree In Web Developer prepares students to become programmers who specialize in the development of web applications using a client-server model. These programmers are responsible for designing, coding, and modifying websites, from layout to function, and according to a client's specifications, striving to create visually appealing sites that feature user-friendly design and clear navigation.

Students who have completed MTC's Full-Stack or Front-End Web Developer Training Certificate from Corporate and Continuing Education within the last 5 years or who hold current professional credentials in HTML5, CSS3, JavaScript, and/or Photoshop may be eligible for advanced placement into this degree. For more information, visit the Computer Technology Web Developer Degree webpage at <https://www.midlandstech.edu/programs-and-courses/science-information-technology-engineering-and-math-stem/computer-technology-0>

**Students must earn a grade of "C" or better in all of the courses offered within the Information Systems Technology Department for the grade to be counted toward graduation. Specifically, these include courses with the prefixes CPT and IST.**

**MAJOR:           COMPUTER TECHNOLOGY WEB DEVELOPER  
(67 CREDIT HOURS)**

**DEGREE:        ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 165	Professional Communications (O)	3.0
MAT 110	College Algebra (O, V)	3.0
PSY 201	General Psychology (O, H, V)	3.0
ART 101	Art History and Appreciation (O, V)	3.0
	Subtotal	16.0

*Major courses meeting other college general education core requirements are starred (\*) below.*

### **B. MAJOR COURSE REQUIREMENTS (34 CREDIT HOURS)**

		<u>Credit Hours</u>
CPT 104	Introduction to Information Technology (O, H)	3.0
CPT 136	Computer Programming Laboratory	1.0
CPT 185	Event Driven Programming (O)	3.0

CPT 236	Introduction to Java Programming (V)	3.0
CPT 242	Database (H, V)	3.0
CPT 244	Data Structures (O, H)	3.0
CPT 247	Unix Operating System	3.0
CPT 257	Operating Systems (O)	3.0
CPT 262	Advanced Web Page Publishing	3.0
CPT 264	Systems and Procedures (O)	3.0
CPT 282	Information Systems Security (O)	3.0
CPT 290	Microcomputer Multimedia Concept and Application (O)	3.0
IST 225	Internet Communications (O, H)	3.0
IST 226	Internet Programming (O)	3.0
IST 238	Advanced Tools for Website Design (O)	3.0
IST 270	Client/Server Systems	3.0
	Subtotal	<u>46.0</u>
	<b>Total Credit Hours:</b>	62.0

## **CYBERSECURITY INFORMATION ASSURANCE CERTIFICATE**

Cybersecurity is a critical component of every network administrator's responsibilities. Organizations report data breaches and network attacks daily, and every organization experiences minor, if not major, attacks on a far too frequent basis. There are currently more jobs available in this area than there are qualified professionals available to fill them, and this need is expected to grow. Midlands Technical College designed the Cyber Information Assurance (CIA) certificate to prepare students for employment in this demanding and ever-growing field.

Students with work experience or certifications in A+ and/or Network+ may qualify for advanced placement into this certificate. Students should contact the IST department for approval.

### **CERTIFICATE: CYBERSECURITY INFORMATION ASSURANCE (30 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
CPT 180	Shell Scripting	3.0
IST 115	Human Aspects In Cybersecurity	3.0
IST 193	Linux Security Administration (O)	3.0
IST 200	Cisco LAN Concepts (V)	3.0
IST 263	Designing Windows Network Security (O)	3.0
IST 267	Network Vulnerability Assessment (V)	3.0
IST 285	Cybersecurity Capstone	3.0
IST 291	Fundamentals of Network Security I	3.0
IST 292	Fundamentals of Network Security II (O)	3.0
IST 293	IT and Data Assurance I	<u>3.0</u>
	<b>Total Credit Hours:</b>	30.0

## DATABASE DEVELOPMENT CERTIFICATE

The Database Development Certificate provides the student an opportunity to gain knowledge of relational databases. The student will use SQL in the design and manipulation of the database. The student will develop Windows-based interfaces as well as Internet-based interfaces. The emphasis will be on database application development.

**Students must earn a grade of “C” or better in all courses for the grade to be counted toward graduation.**

### **CERTIFICATE: DATABASE DEVELOPMENT (31 CREDIT HOURS)**

		<u>Credit Hours</u>
CPT 104	Introduction to Information Technology (O, H)	3.0
CPT 136	Computer Programming Laboratory	1.0
CPT 172	Microcomputer Data Base	3.0
CPT 236	Introduction to Java Programming (V)	3.0
CPT 242	Database (H, V)	3.0
CPT 262	Advanced Web Page Publishing	3.0
IST 225	Internet Communications (O, H)	3.0
IST 226	Internet Programming (O)	3.0
IST 270	Client/Server Systems	3.0
IST 272	Relational Database	3.0
IST 274	Database Administration	<u>3.0</u>
<b>Total Credit Hours:</b>		31.0

## HELP DESK CERTIFICATE

The Help Desk Certificate is designed to provide knowledge in basic technical support and customer service concepts, hardware, advanced software training, interpersonal and professional communications, management information systems, and practical experience under close supervision. The curriculum includes classroom instruction and practice in various office settings.

### **CERTIFICATE: HELP DESK (30 credit hours)**

		<u>Credit Hours</u>
AOT 267	Integrated Information Processing	3.0
CPT 267	Technical Support Concepts (V)	3.0
CPT 268	Computer End-User Support	3.0
EEM 243	Introduction to Computer Servicing	3.0
ENG 165	Professional Communications (O)	3.0
IST 225	Internet Communications (O, V)	3.0
IST 286	Technical Support Internship I	3.0
IST 287	Technical Support Internship II	3.0
MGT 230	Managing Information Resources	3.0
SPC 209	Interpersonal Communication	<u>3.0</u>
<b>Total Credit Hours:</b>		30.0

## NETWORKING SPECIALIST CERTIFICATE

The Networking Specialist Certificate provides the core sequence of courses needed to prepare for the installation, configuration, maintenance and administration of a network infrastructure. The student will work with active directory services. The sequence of courses provides a foundation for students seeking certification through industry standard examinations.

**Students must earn a cumulative grade of “C” or better in all courses to be eligible for graduation.**

### **CERTIFICATE: NETWORKING SPECIALIST (18 CREDIT HOURS)**

		<u>Credit Hours</u>
CPT 176	Microcomputer Operating Systems (O)	3.0
CPT 209	Computer Systems Management (O)	3.0
CPT 255	Operating Systems Fundamentals (O)	3.0
IST 200	Cisco LAN Concepts (V)	3.0
IST 227	Internet Operations and Management	3.0
IST 257	LAN Network Server Technologies	<u>3.0</u>
	<b>Total Credit Hours:</b>	18.0

## ROUTING AND NETWORK CONFIGURATION CERTIFICATE

The certificate in Routing and Network Configuration is a CCNA level series of routing and network configuration courses. This sequence of courses will assist the student in preparing for national certification. The certificate focuses on the configuration of the physical infrastructure supporting networked systems.

**Students must earn a cumulative grade of “C” or better in all courses to be eligible for graduation.**

### **CERTIFICATE: ROUTING AND NETWORK CONFIGURATION (18 CREDIT HOURS)**

		<u>Credit Hours</u>
CPT 285	PC Hardware Concepts	3.0
IST 200	Cisco LAN Concepts (V)	3.0
IST 201	Cisco Internetworking Concepts (V)	3.0
IST 202	Cisco Router Configuration (O, V)	3.0
IST 203	Advanced Cisco Router Configuration	3.0
IST 227	Internet Operations and Management	<u>3.0</u>
	<b>Total Credit Hours:</b>	18.0

## NETWORK SYSTEMS MANAGEMENT

Networking is the common factor in distributed processing, online systems, tele-processing, terminal-based systems and real-time systems. The Network Systems Management curriculum is designed to prepare students to successfully pass several major industry certification exams while completing the degree. The curriculum emphasizes hands-on experience and is constantly tuned to be as “cutting edge” as possible.

NSM students must complete core courses, three approved networking elective courses, and the required general education courses.

Students who hold current certification in CompTia’s A+, Network+ or Security+ may be eligible for advanced placement into this program. For more information, visit the Network Systems Management webpage at <https://www.midlandstech.edu/programs-and-courses/school-science-information-technology-engineering-and-math-stem/network-systems-management>]

**Students must earn a cumulative grade of “C” or better in all courses to be eligible for graduation.**

**MAJOR: NETWORK SYSTEMS MANAGEMENT (60-61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### **A. General Education Course Requirement (16 credit hours)**

		<u>Credit Hours</u>
COL 101	Introduction to College (V)	1.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 165	Professional Communications (O)	3.0
MAT 155	Contemporary Mathematics (O, V)	3.0
PSY 201	General Psychology (O, H, V)	3.0
	Approved Humanities Course	<u>3.0</u>
	Subtotal	16.0

### **B. Major Course Requirements (36 credit hours)**

		<u>Credit Hours</u>
CPT 180	Shell Scripting	3.0
CPT 285	Hardware Concepts	3.0
IST 164	Implementing Network Infrastructure Services (O, V)	3.0
IST 165	Implementing and Administering Active Directory Services	3.0
IST 200	Cisco LAN Concepts (V)	3.0
IST 201	Cisco Internetworking Concepts (V)	3.0
IST 202	Cisco Router Configuration (V)	3.0
IST 227	Internet Operations and Management	3.0
IST 257	LAN Network server Technologies	3.0
IST 260	Network Design (V)	3.0
IST 266	Internet and Firewall Security	3.0
IST 293	IT and Data Assurance I	<u>3.0</u>
	Subtotal	36.0

**C. Additional Course Requirement (9 credit hours)****Elective Choices (8-9 credit hours) – 3 of the following:**

		<u>Credit Hours</u>
CPT 255	Operating Systems Fundamentals	3.0
IST 150	Project Management Essentials for IT Professionals	3.0
IST 203	Advanced Cisco Router Configuration	3.0
IST 261	Advanced Network Administration	3.0
IST 291	Fundamentals of Network Security I	3.0
IST 295	Fundamentals of Voice over IP	3.0
TEL 203	Fundamentals of Wireless Communication	3.0
CWE 112	Cooperative Work Experience I	<u>2.0</u>
	Subtotal	8.0-9.0
	<b>Total Credit Hours</b>	<b>60.0-61.0</b>

**WEB DESIGN AND MAINTENANCE CERTIFICATE****(May be incorporated into an Associate of General Technology Degree)**

The Web Design and Maintenance Certificate provides the student a knowledge base for supporting a website. The student should gain the fundamentals of good web design, connecting to a database and programming for interactive web pages. Moreover, the student should be able to work cooperatively in a team to maintain a website and assist in keeping the content of the website current.

Students who have completed MTC's Catalyte Create Opportunity Program in Corporate and Continuing Education may be eligible for advanced placement into this program. For more information, visit the Web Design and Maintenance Certificate webpage at <https://www.midlandstech.edu/programs-and-courses/science-information-technology-engineering-and-math-stem/web-design/>

**Students must earn a grade of "C" or better in all of the courses in the certificate for the grade to be counted toward graduation.**

**CERTIFICATE: WEB DESIGN AND MAINTENANCE HOURS)****(31 CREDIT**

		<u>Credit Hours</u>
CPT 104	Introduction to Information Technology (O, H)	3.0
CPT 136	Computer Programming Laboratory	1.0
CPT 185	Event-Driven Programming (O)	3.0
CPT 236	Introduction to Java Programming (V)	3.0
CPT 240	Internet Programming with Databases	3.0
CPT 242	Database (O, H, V)	3.0
CPT 262	Advanced Web Page Publishing	3.0
IST 225	Internet Communications (O, H)	3.0
IST 226	Internet Programming	3.0

IST 238	Advanced Tools for Website Design (O)	3.0
IST 270	Client/Server Systems	<u>3.0</u>
<b>Total Credit Hours:</b>		31.0

## **ENGINEERING TECHNOLOGIES AND ENGINEERING TRANSFER**

Programs offered within Engineering Technologies and Engineering Transfer are designed to provide a highly skilled and competent workforce to support the economic development of the Greater Midlands.

Engineering Technology degree programs include Architectural Engineering Technology, Civil Engineering Technology, Electronics Engineering Technology, and Mechanical Engineering Technology.

The disciplines within Engineering Technologies have developed flexible certificate programs designed for students who wish to specialize in a specific area of employment. These certificates also give those in the workforce opportunities to upgrade their skills on state-of-the-art equipment. The certificate curricula are reviewed and updated frequently in response to industry demands, so the student is cautioned to discuss certificate choices and course selections with an Engineering advisor before each registration cycle.

Engineering Technologies also offers a customized Associate Degree in General Technology (AGT), which allows students to plan an individual program of study to meet specific educational goals. These goals can be tailored to the student's interests and the demands of a specific industry such as in Chemical Technology. The AGT is also used for students who wish to pursue a four-year degree in Computer Science or Computer Informations Systems.

Students wishing to pursue a four-year degree in various Engineering concentrations can enroll in the Engineering Fundamentals degree. Such concentrations include Chemical Engineering, Civil Engineering, Computer Engineering, Electrical Engineering, and Mechanical Engineering. Under a long-standing articulation agreement between Midlands Technical College and the University of South Carolina, the College of Engineering and Computing at the University of South Carolina accepts courses from Midlands Technical College for the first two years of the bachelor's degree for several engineering disciplines. Students who complete the Engineering Fundamentals degree and have an overall GPA of 2.75 or higher can apply to transfer to the College of Engineering and Computing at the University of South Carolina as a junior.

### **Associate Degree Programs**

Architectural Engineering Technology  
 Civil Engineering Technology  
 Electronics Engineering Technology  
 Mechanical Engineering Technology  
 General Technology  
 Engineering Fundamentals (Transfer)

## Engineering Technology Certificate Programs

Architectural Computer Graphics  
Architectural Design Technology  
Architectural System and Codes  
Chemical Process Technology  
Chemical Technology  
Computer-Aided Design  
Construction Engineering Technology  
Electronic and Computer Fundamentals  
Engineering Science  
Environmental Systems Technology  
Manufacturing Process Technology  
Mechanical Systems Fundamentals  
Mechanical Technology Fundamentals  
Structural Technology  
Surveying Fundamentals

### ARCHITECTURAL COMPUTER GRAPHICS CERTIFICATE

The Architectural Computer Graphics Certificate is a three-semester 22-credit hour program that addresses the basics of architectural drafting. The program covers fundamentals of computer aided design and project management. This certificate is designed both for students needing a basic introduction to architectural drafting and those who intend to pursue a degree in AET.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

#### **CERTIFICATE: ARCHITECTURAL COMPUTER GRAPHICS (22 CREDIT HOURS)**

		<u>Credit Hours</u>
AET 101	Building Systems I	3.0
AET 120	Architectural Graphics II	3.0
AET 123	Architectural Drafting	3.0
	OR	
AET 110	Architectural Graphics I	
AET 202	History of Architecture	3.0
AET 221	Architectural Computer Graphics II	4.0
AET 235	Architectural 3-D Rendering	3.0
EGT 151	Introduction to CAD	<u>3.0</u>
	<b>Total Credit Hours:</b>	22.0

## ARCHITECTURAL DESIGN TECHNOLOGY CERTIFICATE

The Architectural Design Technology Certificate is a three-semester 29-credit hour program that addresses the basics of architectural design methodology. The program covers fundamentals of computer aided design and project management, and building systems and codes. This certificate is designed both for students needing a basic introduction to architectural engineering and those who intend to pursue a degree in AET.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

### **CERTIFICATE: ARCHITECTURAL DESIGN TECHNOLOGY (29 CREDIT HOURS)**

		<u>Credit Hours</u>
AET 101	Building Systems I	3.0
AET 103	International Building and Residential Codes	3.0
AET 120	Architectural Graphics II (H)	3.0
AET 123	Architectural Drafting	3.0
	OR	
AET 110	Architectural Graphics I	
EGT 151	Introduction to CAD	3.0
CET 235	Construction Methods and estimating	3.0
MAT 110	College Algebra (O, V)	3.0
AET 221	Architectural Computer Graphics	4.0
AET 230	Architectural Graphics II	4.0
	<b>Total Credit Hours:</b>	<u>29.0</u>

## ARCHITECTURAL ENGINEERING TECHNOLOGY

Architectural engineering technicians assist architects, engineers and contractors. A wide variety of jobs are available for graduates, including architectural technicians, estimators and surveyors. Graduates convert preliminary designs of architects and engineers into working drawings and specifications, plan, supervise and do preliminary cost estimates of construction projects; and assist architects, contractors and the allied construction industries in implementing new technological advances and creative designs.

Curricula and prerequisites are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss course selections with an Engineering Advisor before each registration cycle.

This program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

### **Special Requirements**

Students are required to purchase an engineering pocket calculator and a set of drawing instruments. The cost for these instruments will vary from year to year.

## Graduation Requirements

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR:           ARCHITECTURAL ENGINEERING TECHNOLOGY  
(68 CREDIT HOURS)**

**DEGREE:        ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)**

		<u>Credit Hours</u>
AET 202	History of Architecture (O, H)	3.0
ENG 160	Technical Communications (O, V)	3.0
ENG 165	Professional Communications (O)	3.0
MAT 110	College Algebra (O)	3.0
PHY 201	Physics I (V)	4.0
GEO 102	World Geography (O, V)	
OR		
ECO 210	Macroeconomics (V)	<u>3.0</u>
	Subtotal	19.0

### **B. MAJOR COURSE REQUIREMENTS (16 CREDIT HOURS)**

		<u>Credit Hours</u>
AET 101	Building Systems I	3.0
CET 105	Surveying I (H)	3.0
EGR 120	Engineering Computer Applications	3.0
EGR 194	Statics and Strength of Materials	4.0
EGT 151	Introduction to CAD	<u>3.0</u>
	Subtotal	16.0

### **C. ADDITIONAL COURSE REQUIREMENTS (33 CREDIT HOURS)**

		<u>Credit Hours</u>
AET 105	Construction Documents (V)	3.0
AET 120	Architectural Graphics II (H)	3.0
AET 123	Architectural Drafting	3.0
AET 201	Building Systems II	3.0
AET 221	Architectural Computer Graphics II	4.0
AET 230	Architect Graphics III	4.0
CET 220	Concrete and Steel Design	3.0
CET 235	Construction Methods and Cost Estimating*	3.0
COL 101	College Orientation (V)	1.0
MAT 111	College Trigonometry (O, V)	3.0
AET 235	Architectural Three-D Rendering	
OR		
AET 103	International Building and Residential Codes	<u>3.0</u>
	Subtotal	33.0
	<b>Total Credit Hours:</b>	68.0

## ARCHITECTURAL SYSTEMS AND CODES CERTIFICATE

The Architectural System and Codes Certificate is a two-semester 25-credit hour program that addresses the basics of architectural systems and the concepts of “designing to code.” The program covers fundamentals of computer-aided design and building systems and codes. This certificate is designed both for students needing a basic introduction to architectural engineering technology and those who intend to pursue a degree in AET.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

### **CERTIFICATE: ARCHITECTURAL SYSTEMS AND CODES (25 CREDIT HOURS)**

		<u>Credit Hours</u>
AET 101	Building Systems I	3.0
AET 103	International Building and Residential Codes	3.0
AET 105	Construction Documents (V)	3.0
AET 123	Architectural Drafting	
OR		
AET 110	Architectural Graphics I	3.0
AET 201	Building Systems II	3.0
AET 221	Architectural Computer Graphics II	4.0
CET 235	Construction Methods and Estimating	3.0
MAT 110	College Algebra (O, V)	3.0
<b>Total Credit Hours:</b>		<u>25.0</u>

## CHEMICAL PROCESS TECHNOLOGY CERTIFICATE

The Chemical Process Technology Certificate is a three-semester 35-credit hour program that addresses the fundamentals of chemical process systems technology. The program covers fundamentals of process technology including mechanical and electrical components, plant unit operations and instrumentation. This certificate is designed both for students needing a background in process technology principles and for those who intend to pursue a degree in chemical technology. This certificate is designed to dovetail easily with the Chemical Technology Certificate and/or the Mechanical Engineering technology program. This certificate can be combined with general education courses and one other certificate, such as the Certificate in Chemical Technology, to create an Associates of General Technology (AGT) degree in Chemical Process Technology. The AGT must conform to very specific requirements and be approved by the Department Chair. Students should consult their Engineering Technology advisor regarding this option.

Graduates from this certificate program are qualified to enter the workforce as a medium level operator, process technician, or senior manufacturing technician. The course sequence is designed to also prepare the student for more advanced on-the-job training in chemical technology or in a manufacturing process.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

### **CERTIFICATE: CHEMICAL PROCESS TECHNOLOGY (35 CREDIT HOURS)**

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	
OR		
CHM 106	Contemporary Chemistry I	4.0
CHM 111	College Chemistry II (V)	4.0
CHT 224	Current Topics in Industrial Chemistry	4.0
CHT 250	Methods in Analytical Chemistry I	3.0
CHT 275	Chemical Process Technology	3.0
CHT 276	Advanced Chemical Process Technology	3.0
EET 102	Introduction to Data Acquisition	1.0
EET 103	Introduction to Electronics (V)	3.0
MAT 110	College Algebra (O, V)	3.0
MET 250	Special Topics in Mechanical Technology	4.0
CHT 230	Survey in Engineering Chemistry	
OR		
CHT	Methods in Analytical Chemistry II	<u>3.0</u>
<b>Total Credit Hours</b>		<b>35.0</b>

### **CHEMICAL SYSTEMS FUNDAMENTALS CERTIFICATE**

This certificate presents basic chemical engineering courses. The program covers the theory of chemical systems, process principles and organic chemistry. Students trained in this area are capable of working as entry-level lab assistants and are well prepared for more advanced study in chemical engineering at the bachelor's degree level.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Advisor before each registration cycle.

### **CERTIFICATE: CHEMICAL SYSTEMS FUNDAMENTALS (18 CREDIT HOURS)**

		<u>Credit Hours</u>
CHM 211	Organic Chemistry (V)	4.0
CHM 212	Organic Chemistry II (V)	4.0
EET 102	Introduction to Data Acquisition	1.0
EGR 280	Chemical Process Principles	3.0
EGR 266	Engineering Thermodynamics Fundamentals	3.0
EGR 270	Introduction to Engineering	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>18.0</b>

## CHEMICAL TECHNOLOGY CERTIFICATE

The Chemical Technology certificate (CHT) is a three-semester 35-credit hour program that prepares students for employment as technicians playing a major role in the synthesis, manufacture, and analysis of engineered materials, and basic chemical constituents and intermediates. Chemical technicians work primarily as assistants to engineers and chemists doing basic research, manufacturing, analyses, and quality control. There is a significant need for qualified technicians to assist chemists and chemical engineers, and the allied materials industries, to implement new technological advances, and to development new materials and new analytical techniques.

The program is designed to admit qualified students who need a basic introduction to Chemical Technology and others who desire to pursue a degree in chemistry, chemical technology, or chemical engineering. This certificate can be combined with general education courses and one other certificate, such as the Certificate in Chemical Process Technology, to create an Associates of General Technology (AGT) degree in Chemical Technology. The AGT must conform to very specific requirements and be approved by the Department Chair. Students should consult their Engineering Technology advisor regarding this option.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

### **CERTIFICATE: CHEMICAL TECHNOLOGY (35 CREDIT HOURS)**

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	
CHM 111	College Chemistry II (V)	
CHT 230	Survey in Engineering Chemistry	3.0
CHT 250	Methods in Analytical Chemistry I	3.0
CHT 252	Methods in Analytical Chemistry II	3.0
CHT 275	Chemical Process Technology	3.0
EGR 120	Engineering Computer Applications	3.0
EGR 170	Engineering Materials	3.0
ENG 101	English Composition I (O, H, V)	
	OR	
SPC 209	Interpersonal Communication	3.0
MAT 110	College Algebra (O, V)	3.0
QAT 102	Quality Concepts and Techniques	<u>3.0</u>
	<b>Total Credit Hours:</b>	<b>35.0</b>

## CIVIL ENGINEERING TECHNOLOGY

Civil Engineering Technology graduates play a major role in the design and construction of airports, bridges, highways, pipelines, and water and sewage systems. They can become professionally licensed land surveyors, steel detailers, construction superintendents, civil engineering technologists and technicians, engineering design

assistants, cost estimators and public works technicians. To perform this work, civil engineering technicians must possess knowledge and skills in such technical areas as surveying, construction materials and cost estimating, structures, hydraulics, project management and the use of computers.

Curricula and prerequisites are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss course selections with an Engineering Advisor before each registration cycle

This program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

### Special Requirements

Students are required to purchase an engineering pocket calculator at an approximate cost of \$75.

### Graduation Requirements

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR: CIVIL ENGINEERING TECHNOLOGY (67 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)

	<u>Credit Hours</u>
AET 202 History of Architecture (O, H)	3.0
ENG 160 Technical Communications (O, V)	3.0
ENG 165 Professional Communications (O)	3.0
MAT 110 College Algebra (O, V)	3.0
PHY 201 Physics I (V)	4.0
GEO 102 World Geography (O, V)	
OR	
ECO 210 Macroeconomics (V)	
OR	
ECO 211 Microeconomics (O, V)	<u>3.0</u>
Subtotal	19.0

### B. MAJOR COURSE REQUIREMENTS (19 CREDIT HOURS)

	<u>Credit Hours</u>
CET 105 Surveying I (H)	3.0
CET 120 Construction Materials	3.0
EGR 104 Engineering Technology Fundamentals (H)	3.0
EGR 120 Engineering Computer Applications	3.0
EGR 194 Statics and Strength of Materials	4.0
EGT 151 Introduction to CAD	<u>3.0</u>
Subtotal	19.0

### C. ADDITIONAL COURSE REQUIREMENTS (34 CREDIT HOURS)

		<u>Credit Hours</u>
AET 105	Construction Documents (V)	3.0
CET 205	Surveying II	4.0
CET 216	Soil Mechanics	3.0
CET 218	Hydraulics	3.0
CET 220	Concrete and Steel Design	3.0
CET 235	Construction Methods and Cost Estimating	3.0
CET 246	Environmental Systems Technology (V)	3.0
OR		
CET 251	Highway Design	3.0
COL 101	College Orientation (V)	1.0
EGT 257	Advanced Civil CAD	3.0
MAT 111	College Trigonometry (O, V)	<u>3.0</u>
	Subtotal	29.0
	<b>Total Credit Hours:</b>	67.0

### COMPUTER-AIDED DESIGN CERTIFICATE

The Computer-Aided Design Certificate is a three-semester 22-credit hour program that addresses the fundamentals of computer-aided design. The program covers basic CAD principles, 3-D rendering, basic rapid prototyping, and special topics in engineering project management. This certificate is designed both for students needing a basic introduction to mechanical technology and for those who intend to pursue a degree.

The Computer-Aided Design Certificate prepares students for employment as entry-level technicians capable of supporting the 2D and 3D CAD and modeling requirements of most industrial design and manufacturing organizations.

This certificate is designed to be used as an option within the Mechanical Engineering Technology Degree, or it can be used to dovetail easily with other certificates to build an Associate in General Technology degree specific to the student and potential employer's needs.

Certificate and curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

### **CERTIFICATE: COMPUTER-AIDED DESIGN (22 CREDIT HOURS)**

		<u>Credit Hours</u>
EGT 106	Print Reading and Sketching (V)	3.0
EGT 156	Intermediate CAD Applications	3.0
EGT 245	Principles of Parametric CAD (V)	3.0
EGT 256	Modeling Mechanical Systems (O)	3.0
EGT 258	Applications of CAD	3.0
EGT 285	Integrated Rapid Prototyping Applications	3.0

MAT 110	College Algebra (O, V)	3.0
MET 240	Mechanical Senior Project	<u>1.0</u>
<b>Total Credit Hours:</b>		22.0

## **CONSTRUCTION ENGINEERING TECHNOLOGY CERTIFICATE**

The Construction Engineering Technology Certificate is a three semester 35-credit hour program that addresses principles of engineering project management, engineering properties and testing procedures for construction materials, contract documents and legal concepts, material quantity and cost estimating, surveying, plans and specifications, and highway design.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

### **CERTIFICATE: CONSTRUCTION ENGINEERING TECHNOLOGY (35 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
AET 105	Construction Documents (V)	3.0
CET 105	Surveying I (H)	3.0
CET 120	Construction Materials	3.0
CET 205	Surveying II	4.0
CET 235	Construction Methods and Cost Estimation	3.0
CET 251	Highway Design	3.0
EGR 104	Engineering Technology Foundations	3.0
EGR 194	Statics and Strength of Materials	4.0
EGT 151	Introduction to CAD	
OR		
EGT 106	Print Reading and Sketching (V)	3.0
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	<u>3.0</u>
<b>Total Credit Hours:</b>		35.0

## **ELECTRONIC AND COMPUTER FUNDAMENTALS CERTIFICATE**

This certificate presents basic electrical engineering and related computer engineering courses. The program covers the basic theory of electrical engineering circuits and computer logic from both the component and board-level perspectives. Students trained in this area are capable of working in design and troubleshooting, and are prepared for more advanced study in electrical and computer engineering, computer science, and computer information technology.

The certificate can be combined with the Certificate in Engineering Science to create an Associate of General Technology (AGT) that can be used as the foundation for a four-year degree in Computer Science or Computer Information Systems.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Advisor before each registration cycle.

### **CERTIFICATE: ELECTRONIC AND COMPUTER FUNDAMENTALS (18 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
ECE 102	Instrument Control	3.0
ECE 205	Electrical and Computer Lab	3.0
ECE 211	Introduction to Computer Engineering I	3.0
ECE 212	Introduction to Computer Engineering II	3.0
ECE 221	Introduction to Electrical Engineering I	3.0
ECE 222	Introduction to Electrical Engineering II (V)	<u>3.0</u>
<b>Total Credit Hours:</b>		18.0

### **ELECTRONICS ENGINEERING TECHNOLOGY**

Electronics engineering technicians combine practical hands-on skills with a theoretical approach to repairing, maintaining, and troubleshooting electronic equipment including computers, PLCs, electronic instruments and control devices. Graduates of this program may work in a manufacturing environment, research facility, sales center or educational institution.

Curricula and prerequisites are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss course selections with an Engineering Technology Advisor before each registration cycle.

This program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

#### **Special Requirements**

Students are required to purchase a graphing calculator and a small set of hand tools.

#### **Graduation Requirements**

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR: ELECTRONICS ENGINEERING TECHNOLOGY  
(66 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

## A. GENERAL EDUCATION COURSE REQUIREMENTS (18 CREDIT HOURS)

		<u>Credit Hours</u>
AET 202	History of Architecture (O, H), or any approved humanities course	3.0
ENG 160	Technical Communications (O, V)	3.0
ENG 165	Professional Communications	3.0
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
GEO 102	World Geography (O, V)	
OR		
ECO 210	Macroeconomics (V)	<u>3.0</u>
	Subtotal	18.0

Major courses meeting other college general education core requirements are starred (\*) below.

## B. MAJOR COURSE REQUIREMENTS (45 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
EET 102	Introduction to Data Acquisition	1.0
EET 103	Introduction to Electronics (V)	3.0
EET 113	Electrical Circuits I	4.0
EET 114	Electrical Circuits II	4.0
EET 141	Electronic Circuits	4.0
EET 210	Digital Integrated Circuits	4.0
EET 220	Analog Integrated Circuits	3.0
EET 227	Electrical Machinery	3.0
EET 235	Programmable Controllers	3.0
EET 251	Microprocessor Fundamentals	4.0
EET 255	Advanced Microprocessors	3.0
EET 273	Electronics Senior Project (V)	1.0
EGR 110	Introduction to Computer Environment*	3.0
PHY 201	Physics I (V)	<u>4.0</u>
	Subtotal	45.0

## C. ADDITIONAL COURSE REQUIREMENTS (3 CREDIT HOURS)

**Elective Choices (3 credit hours) – One of the following**

		<u>Credit Hours</u>
EGT 151	Introduction to CAD	3.0
MET 250	Special Topics in Mechanical Technology	4.0
EGT 106	Print Reading and Sketching (V)	3.0
EGT 151	Intermediate CAD	3.0
CPT 236	Introduction to Java Programming (V)	<u>3.0</u>
	Subtotal	<u>3.0</u>
	<b>Total Credit Hours:</b>	66.0

## ENGINEERING SCIENCE CERTIFICATE

The Engineering Science Certificate is a three-semester (38-credit-hour) program designed for students desiring to transfer to an engineering program at a four-year institution. The Engineering Science Certificate can be combined with the Electronic and Computer Fundamentals Certificate to create an Associate in General Technology degree for students wishing to transfer to a four-year institution for Computer Science or Computer Information Systems. The student is strongly advised to consult their Engineering faculty or advisor to determine which options are right for them.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Advisor before each registration cycle.

### **CERTIFICATE: ENGINEERING SCIENCE (38 CREDIT HOURS)**

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	4.0
CHM 111	College Chemistry II (V)	4.0
PHY 221	University Physics I (V)	4.0
PHY 222	University Physics II (V)	4.0
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
MAT 141	Analytical Geometry and Calculus II (O, V)	4.0
MAT 240	Analytical Geometry and Calculus III	4.0
MAT 242	Differential Equations	4.0
	Approved EGR Transfer Course	3.0
	Approved Program Elective	<u>3.0</u>
	<b>Total Credit Hours:</b>	<b>38.0</b>

## ENVIRONMENTAL SYSTEMS TECHNOLOGY CERTIFICATE

Environmental engineering technicians prepare, test, operate, and modify structures, equipment, and systems used to prevent or mitigate environmental pollution. Currently the demand for chemical technicians in the Midlands area is significant and growing. Recently, an ad hoc committee comprised of representatives from Columbia area businesses indicated that the demand for chemical and environmental technicians with basic skills in laboratory technique, quality control, instruments and calibration, general chemistry, spectroscopy, and related skills will remain high for many years as these businesses continue to grow.

Graduates from this certificate program are qualified to enter the workforce as a medium level operator, laboratory technician, water quality technician, or senior manufacturing technician. The course sequence is designed to also prepare the student for more advanced on-the-job training in chemical technology or in an environmental laboratory.

The Environmental Systems Technology Certificate is a four-semester 33-credit hour Chemical Technology program that addresses the fundamentals of environmental systems technology. The program covers fundamentals of analytical instrumentation, water treatment principles, and environmental systems technology among other

related topics. This certificate is designed both for students needing a background in environmental technology principles and for those who intend to pursue a degree in chemical technology. This certificate is designed to dovetail easily with the Chemical Technology Certificate and/or the Civil Engineering technology program.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

**CERTIFICATE: ENVIRONMENTAL SYSTEMS TECHNOLOGY  
(33 CREDIT HOURS)**

		<u>Credit Hours</u>
CET 218	Hydraulics	3.0
CET 246	Environmental Systems Technology (V)	3.0
CHM 110	College Chemistry I (V)	
OR		
CHM 106	Contemporary Chemistry I	4.0
CHM 111	College Chemistry II (V)	
OR		
CHM 112	College Chemistry II	4.0
CHT 250	Methods in Analytical Chemistry I	3.0
CHT 252	Methods in Analytical Chemistry II	3.0
EVT 102	Basic Water Treatment	3.0
EVT 111	Introduction to Water and Wastewater Treatment Lab	1.0
EVT 271	Special Topics in Environmental Engineering	3.0
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	<u>3.0</u>
<b>Total Credit Hours:</b>		<b>33.0</b>

**MANUFACTURING PROCESS TECHNOLOGY CERTIFICATE**

The Manufacturing Process Technology Certificate is a three-semester 37-credit hour program that addresses the fundamentals of manufacturing processes. The program covers fundamentals of process technology including mechanical and electrical components, basic chemical processes, plant unit operations and instrumentation. An elective course is included to encourage the student to study more electrical and/or chemical technology-related topics. This certificate is designed to dovetail easily with the Chemical Technology Certificate and/or the Mechanical Engineering Technology program. Graduates from this certificate program are qualified to enter the workforce as a medium level operator, process technician, or senior manufacturing technician. The course sequence is designed to also prepare the student for more advanced on-the-job training in manufacturing process.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

**CERTIFICATE: MANUFACTURING PROCESS TECHNOLOGY  
(37 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
CHM 110	College Chemistry I (V)	
OR		
CHM 106	Contemporary Chemistry I	4.0
CHT 224	Current Topics in Industrial Chemistry	4.0
EGR 120	Engineering Computer Applications	3.0
EGR 175	Manufacturing Processes	3.0
EGT 106	Print Reading and Sketching (V)	3.0
MAT 110	College Algebra (O, V)	3.0
MET 105	DC and AC Electricity	4.0
MET 216	Mechanics of Fluid Systems	3.0
MET 227	Instrumentation Principles	3.0
MET 240	Mechanical Senior Projects	1.0
QAT 102	Quality Concepts and Techniques	3.0
	Approved Engineering Elective	<u>3.0</u>
<b>Total Credit Hours:</b>		37.0

**MECHANICAL ENGINEERING TECHNOLOGY**

The Mechanical Engineering Technology program provides students with the opportunity to enter the engineering technology field as a Mechanical or Computer-Aided Design and Drafting (CAD) Technician. Graduates may find themselves working in industries where they take a product from conception or design and follow the product through the manufacturing process. In the power generation industry, the technician can be involved in everything from basic maintenance and failure analysis to health and safety management. The basic program covers the fundamentals of computer assisted drafting, thermal and electrical science, manufacturing, and mechanical design. Students will gain an understanding of the effects of forces, motion, material strength, and the principles of hydraulics and pneumatics.

**Graduation Requirements**

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR: MECHANICAL ENGINEERING TECHNOLOGY  
(69 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (26 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
CHM 110	College Chemistry I (V)	4.0
ENG 160	Technical Communications (O, V)	3.0
ENG 165	Professional Communications	3.0

MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
PHY 201	Physics (V)	4.0
AET 202	History of Architecture, or any approved humanities course	3.0
GEO 102	World Geography (O, V)	
OR		
ECO 210	Macroeconomics (V)	
OR		
ECO 211	Microeconomics (O, V0)	3.0
	Subtotal	<u>26.0</u>

## B. MAJOR COURSE REQUIREMENTS (37 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
EGR 104	Engineering Technology Fundamentals (H)	3.0
EGR 120	Engineering Computer Applications	3.0
EGR 170	Engineering Materials	3.0
EGR 175	Manufacturing Processes	3.0
EGR 194	Statics and Strength of Materials	4.0
EGT 106	Print Reading and Sketching (V)	3.0
EGT 156	Intermediate CAD Applications	3.0
MET 105	DC and AC Electricity	4.0
MET 216	Mechanics of Fluid Systems	3.0
MET 217	Dynamics and Kinematics	3.0
MET 223	Thermodynamic Systems	3.0
MET 240	Mechanical Senior Project	1.0
	Subtotal	<u>37.0</u>

## C. ADDITIONAL COURSE REQUIREMENTS (6 CREDIT HOURS)

	<u>Credit Hours</u>
Approved MET Elective	3.0
Approved MET Elective	3.0
	Subtotal
	<u>6.0</u>
<b>Total Credit Hours:</b>	69.0

## ELECTIVE OPTIONS

### APPROVED ENGINEERING TECHNOLOGY ELECTIVES

#### Architectural:

AET 103, AET 105

#### Chemical:

CHM 111, CHT 110, CHT 224, CHT 230, CHT 271, CHT 275, CHT 276

#### Civil:

CET 216, CET 218, CET 220, CET 246

#### Electrical:

EET 103, EET 210, EET 227, EET 235, EET 251

#### Environmental:

EVT 102, EVT 111, EVT 271, EVT 254

**Mechanical:**

MET 224, MET 245, MET 250

**Nuclear:**EGR 205, NET 112, NET 122, NET 130, NET 210, NET 225,  
NET 230, NET 240**Manufacturing:**

EGR 176, MET 227, MET 235, QAT 102

**Math:**

MAT 120, MAT 130, MAT 140

**CAD:**

EGT 245, EGT 255, EGT 258, EGT 285

**MECHANICAL SYSTEMS FUNDAMENTALS CERTIFICATE**

This certificate consists of basic mechanical engineering and related civil engineering courses. The program covers the basic theory of mechanical engineering systems and associated mechanics and thermodynamics. Students trained in this area are capable of working in design and troubleshooting, and are prepared for more advanced study in mechanical and civil engineering.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Advisor before each registration cycle.

**CERTIFICATE: MECHANICAL SYSTEMS FUNDAMENTALS  
(18 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
EGR 260	Engineering Statics (V)	3.0
EGR 264	Introduction to Engineering Mechanics of Solids (V)	3.0
EGR 266	Engineering Thermodynamics Fundamentals	3.0
EGR 270	Introduction to Engineering	3.0
EGR 274	Engineering Applications of Numerical Methods	3.0
EGR 275	Introduction to Engineering Computer Graphics (V)	<u>3.0</u>
<b>Total Credit Hours:</b>		18.0

**MECHANICAL TECHNOLOGY FUNDAMENTALS CERTIFICATE**

The Mechanical Technology Fundamentals certificate is a four-semester 39-credit hour program that addresses the fundamentals of mechanical technology. The program covers fundamentals of instrumentation, statics, material properties, basic electronics, basic computer operation, print reading and introductory CAD, and engineering project management. This certificate is designed both for students needing a basic introduction to mechanical technology and for those who intend to pursue an Engineering Technology degree. Upon completion of this certificate, the graduate is qualified to pursue more advanced training or work as an entry level operator. This certificate is designed to dove-tail easily with other MET certificates and the MET degree. To assure

maximum employability, the student should consider courses beyond the fundamentals in either a certificate or degree option. Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

**CERTIFICATE: MECHANICAL TECHNOLOGY FUNDAMENTALS  
(39 CREDIT HOURS)**

		<u>Credit Hours</u>
EGR 120	Engineering Computer Applications	3.0
EGR 170	Engineering Materials	3.0
EGR 175	Manufacturing Processes	3.0
EGR 194	Statics and Strength of Materials	4.0
EGT 106	Print Reading and Sketching (V)	3.0
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
MET 105	DC and AC Electricity	4.0
MET 216	Mechanics of Fluid Systems	3.0
MET 217	Dynamics and Kinematics	3.0
MET 223	Thermodynamic Systems	3.0
PHY 201	Physics (V)	<u>4.0</u>
<b>Total Credit Hours:</b>		<b>39.0</b>

**STRUCTURAL TECHNOLOGY CERTIFICATE**

The Structural Technology Certificate is a four-semester 28-credit hour program that examines the engineering properties and testing of a variety of building materials; principles of analysis and design of concrete and steel structures; estimation of material quantity takeoffs and costs; engineering plans and specifications; and legal principles and contract documents for engineering construction projects. Steel detailing concepts are also addressed in structural steel design.

The certificate will meet the needs of students seeking a basic introduction to structural-related engineering projects as well as those who intend to pursue a degree.

Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

**CERTIFICATE: STRUCTURAL TECHNOLOGY (28 CREDIT HOURS)**

		<u>Credit Hours</u>
AET 105	Construction Documents (V)	3.0
CET 120	Construction Materials	3.0
CET 220	Concrete and Steel	3.0
CET 235	Construction Methods and Cost Estimation	3.0
EGR 104	Engineering Technology Foundations (H)	3.0
EGR 194	Statics and Strength of Materials	4.0

EGT 151	Introduction to CAD	
OR		
EGR 106	Print Reading and Sketching	3.0
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
<b>Total Credit Hours:</b>		<u>28.0</u>

## **SURVEYING FUNDAMENTALS CERTIFICATE**

The Surveying Fundamentals Certificate is a three-semester 20-credit hour program that offers a route to surveying licensure for not only students who are beginning their careers, but also those who are looking to transfer to four-year programs and those who are already in the workforce and are looking to advance their careers.

The program's unique curriculum will prepare students through surveying theory and practice, care and use of instruments, procedures and instrumentations, and computations and leveling. Students will also learn about field astronomy, highway curves, and topographic surveying. Surveying has evolved from what it once was, and now encompasses new technology such as drones, laser scanned projects, and satellites.

According to industry partners, there is a great demand for licensed surveyors and MTC is providing a clear pathway to meet the educational requirements. Certificate curricula are reviewed and updated periodically in response to community and industry demands. The student is cautioned to discuss certificate choices and course selections with an Engineering Technology Advisor before each registration cycle.

### **CERTIFICATE: SURVEYING FUNDAMENTALS (20 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
CET 105	Surveying I (H)	3.0
CET 205	Surveying II	4.0
CET 251	Highway Design	3.0
EGT 151	Introduction to CAD	3.0
MAT 110	College Algebra (O, V)	3.0
PHY 201	Physics I (V)	<u>4.0</u>
<b>Total Credit Hours:</b>		20.0

## **ENGINEERING FUNDAMENTALS DEGREE (2+2 TRANSFER)**

Students who wish to transfer to a four-year institution in engineering should enroll in the Engineering Fundamentals program. The Engineering Fundamentals degree allows the student to complete the first two years of an engineering course of study and then transfer to a four-year institution to earn a bachelor's degree in engineering. Midlands Technical College offers this option in the areas of Electrical, Computer, Civil, Mechanical, and Chemical Engineering. Students who wish to transfer into the Computer Science or Computer Information Systems programs should enroll in the

Engineering Science certificate and work with their advisor to create an Associate in General Technology (AGT).

Under a long-standing articulation agreement between Midlands Technical College and the University of South Carolina, the College of Engineering and Computing at the University of South Carolina accepts courses from Midlands Technical College for the first two years of the bachelor's degree for all of the disciplines listed above. Students who complete an Associate in Applied Science in Engineering Fundamentals and have an overall GPA of 2.75 or higher may seek admission to transfer to the College of Engineering and Computing at the University of South Carolina as a junior.

**MAJOR: ENGINEERING FUNDAMENTALS (68-75 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)**

	<u>Credit Hours</u>
ENG 101 English Composition I (O, H, V)	3.0
ENG 102 English Composition II (O, H, V)	3.0
MAT 140 Analytical Geometry and Calculus I (O, V)	4.0
Approved History/Humanities	3.0
Approved Fine Arts Course	3.0
Approved Social/Behavioral Science Course	<u>3.0</u>
Subtotal	19.0

**B. MAJOR COURSE REQUIREMENTS (24-25 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 101 College Orientation (V)	1.0
CHM 110 College Chemistry I (V)	4.0
MAT 141 Analytical Geometry and Calculus II (O, V)	4.0
MAT 240 Analytical Geometry and Calculus III	4.0
MAT 242 Differential Equations	4.0
PHY 221 University Physics I (V)	4.0
EGR 270* Introduction to Engineering	3.0
OR	
EGR 281* Introduction to Algorithmic Design (V)	<u>4.0</u>
Subtotal	24.0-25.0

\* Students in the Chemical, Civil and Mechanical programs take EGR 270, Students in Electrical, Computer Engineering, Computer Science, and Computer Information Systems take EGR 281.

**C. ADDITIONAL COURSE REQUIREMENTS (28-32 CREDIT HOURS)**

	<u>Credit Hours</u>
Approved Engineering Electives (9-11 total)	<u>3.0</u>
Subtotal	28.0-32.0
<b>Total Credit Hours:</b>	<b>68.0-75.0</b>

# ENGINEERING FUNDAMENTALS WITH A CONCENTRATION IN CHEMICAL ENGINEERING

## Graduation Requirements

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR:           ENGINEERING FUNDAMENTALS- CONCENTRATION IN  
CHEMICAL ENGINEERING (71 CREDIT HOURS)**

**DEGREE:        ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)**

	<u>Credit Hours</u>
ENG 101      English Composition I (O, H, V)	3.0
ENG 102      English Composition II (O, H, V)	3.0
MAT 140      Analytical Geometry and Calculus I (O, V)	4.0
Approved History/Humanities	3.0
Approved Fine Arts Course	3.0
Approved Social/Behavioral Science Course	3.0
Subtotal	<u>19.0</u>

### **B. MAJOR COURSE REQUIREMENTS (24 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 101      College Orientation (V)	1.0
CHM 110      College Chemistry I (V)	4.0
MAT 141      Analytical Geometry and Calculus II (O, V)	4.0
MAT 240      Analytical Geometry and Calculus III	4.0
MAT 242      Differential Equations	4.0
PHY 221      University Physics I (V)	4.0
EGR 270      Introduction to Engineering	<u>3.0</u>
Subtotal	<u>24.0</u>

### **C. ADDITIONAL COURSE REQUIREMENTS (28 CREDIT HOURS)**

	<u>Credit Hours</u>
CHM 111      College Chemistry II (V)	4.0
CHM 211      Organic Chemistry I (V)	4.0
CHM 212      Organic Chemistry II (V)	4.0
EGR 266      Engineering Thermodynamics Fundamentals	3.0
PHY 222      University Physics II (V)	4.0
EGR 268      Fluid Mechanics	3.0
EGR 274      Engineering Applications of Numerical Methods	3.0
EGR 280      Chemical Process Principles	<u>3.0</u>
Subtotal	<u>28.0</u>

**Total Credit Hours:        71.0**

# ENGINEERING FUNDAMENTALS WITH A CONCENTRATION IN CIVIL ENGINEERING

## Graduation Requirements

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR:           ENGINEERING FUNDAMENTALS- CONCENTRATION IN CIVIL  
ENGINEERING (72 CREDIT HOURS)**

**DEGREE:        ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)**

	<u>Credit Hours</u>
ENG 101      English Composition I (O, H, V)	3.0
ENG 102      English Composition II (O, H, V)	3.0
MAT 140      Analytical Geometry and Calculus I	4.0
Approved History/Humanities	3.0
Approved Fine Arts Course	3.0
Approved Social/Behavioral Science Course	3.0
Subtotal	<u>19.0</u>

### **B. MAJOR COURSE REQUIREMENTS (24 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 101      College Orientation (V)	1.0
CHM 110      College Chemistry (V)	4.0
MAT 141      Analytical Geometry and Calculus II (O, V)	4.0
MAT 240      Analytical Geometry and Calculus III	4.0
MAT 242      Differential Equations	4.0
PHY 221      University Physics I (V)	4.0
EGR 270      Introduction to Engineering	<u>3.0</u>
Subtotal	<u>24.0</u>

### **C. ADDITIONAL COURSE REQUIREMENTS (29 CREDIT HOURS)**

	<u>Credit Hours</u>
CHM 111      College Chemistry II (V)	4.0
EGR 260      Engineering Statics (V)	3.0
PHY 222      University Physics II (V)	4.0
EGR 209      Statistics for Engineers (V)	3.0
EGR 262      Engineering Dynamics	3.0
EGR 264      Introduction to Engineering Mechanics of Solids	3.0
EGR 268      Engineering Fluid Mechanics	3.0
EGR 274      Engineering Applications of Numerical Methods	3.0
EGR 275      Introduction to Engineering/Computer Graphics (V)	<u>3.0</u>
Subtotal	<u>29.0</u>
<b>Total Credit Hours:</b>	<b>72.0</b>

# ENGINEERING FUNDAMENTALS WITH A CONCENTRATION IN COMPUTER ENGINEERING

## Graduation Requirements

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR: ENGINEERING FUNDAMENTALS- CONCENTRATION IN COMPUTER ENGINEERING (76 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### **A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)**

	<u>Credit Hours</u>
ENG 101 English Composition I (O, H, V)	3.0
ENG 102 English Composition II (O, H, V)	3.0
MAT 140 Analytical Geometry and Calculus I (O, V)	4.0
Approved History/Humanities	3.0
Approved Fine Arts Course	3.0
Approved Social/Behavioral Science Course	<u>3.0</u>
Subtotal	19.0

### **B. MAJOR COURSE REQUIREMENTS (24 CREDIT HOURS)**

	<u>Credit Hours</u>
COL 101 College Orientation (V)	1.0
CHM 110 College Chemistry (V)	4.0
MAT 141 Analytical Geometry and Calculus II (O, V)	4.0
MAT 240 Analytical Geometry and Calculus III	4.0
MAT 242 Differential Equations	4.0
PHY 221 University Physics I (V)	4.0
EGR 281 Introduction to Algorithmic Design (V)	<u>4.0</u>
Subtotal	25.0

### **C. ADDITIONAL COURSE REQUIREMENTS (32 CREDIT HOURS)**

	<u>Credit Hours</u>
CPT 247 UNIX Operating Systems	3.0
ECE 102 Instrument Control	3.0
ECE 211 Introduction to Computer Engineering I	3.0
ECE 240 Introduction to Software Engineering	3.0
PHY 222 University Physics II (V)	4.0
EGR 209 Statistics for Engineers (V)	3.0
ECE 212 Introduction to Computer Engineering II	3.0
ECE 221 Introduction to Electrical Engineering I	3.0
EGR 283 Introduction to Algorithmic Design II	3.0
SPC 205 Public Speaking (O, H, V)	<u>3.0</u>
Subtotal	32.0
<b>Total Credit Hours:</b>	<b>76.0</b>

**ASSOCIATE IN GENERAL TECHNOLOGY:**  
**COMPUTER INFORMATIONS SYSTEMS**

**MAJOR:           COMPUTER INFORMATION SYSTEMS (71 CREDITS)**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (21 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition I (O, H, V)	3.0
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry	3.0
	Approved History/Humanities	3.0
	Approved Fine Arts Courses	3.0
	Approved Social/Behavioral Science Course	3.0
	Subtotal	<u>21.0</u>

**B. MAJOR COURSE REQUIREMENTS (23 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
CPT 247	UNIX Operating System	3.0
EGR 209	Statistics for Engineers (V)	3.0
EGR 281	Introduction to Algorithmic Design (V)	4.0
EGR 283	Introduction to Algorithmic Design II	4.0
MAT 130	Elementary Calculus (O, V)	4.0
PHY 201	Physics I (V)	4.0
	Subtotal	<u>23.0</u>

**C. CONCENTRATION (27 CREDIT HOURS)**

		<u>Credit Hours</u>
ACC 101	Accounting Principles I (O, V)	3.0
BUS 130	Business Communications (O, V, H)	3.0
ECE 240	Introduction to Software Engineering	3.0
ECO 210	Macroeconomics (V)	3.0
ECO 211	Microeconomics (O, V)	3.0
BIO 101		
	ANY HIS/SBS/FINE ART Transfer course	
	ANY HIS/SBS/FINE ART Transfer course	
	Subtotal	27.0
	<b>Total Credit Hours:</b>	<b>71.0</b>

# ASSOCIATE IN GENERAL TECHNOLOGY: COMPUTER SCIENCE

**MAJOR: COMPUTER SCIENCE (71 CREDITS)**

## **A. GENERAL EDUCATION COURSE REQUIREMENTS (29 CREDIT HOURS)**

		<u>Credit Hours</u>
BIO 101	Biological Science I (V)	4.0
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition I (O, H, V)	3.0
MAT 140	Calculus and Analytical Geometry I (O, V)	4.0
SPC 205	Public Speaking (O, H, V)	3.0
	Approved History/Humanities	3.0
	Approved Fine Arts Courses	3.0
	Approved Social/Behavioral Science Course	3.0
	Subtotal	29.0

## **B. MAJOR COURSE REQUIREMENTS (24 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
CHM 110	College Chemistry (V)	4.0
CHM 111	College Chemistry II (V)	4.0
EGR 209	Statistics for Engineers (V)	3.0
EGR 281	Introduction to Algorithmic Design (V)	4.0
MAT 141	Anal Geom & Calc II (O, V)	4.0
MAT 240	Anal Geom & Calc III	4.0
	Subtotal	24.0

## **C. CONCENTRATION (18 CREDIT HOURS)**

		<u>Credit Hours</u>
BUS 130	Business Communications (O, V, H)	3.0
CPT 247	UNIX Operating System (O, H)	3.0
ECE 211	Introduction to Computer Engineering I	3.0
ECE 212	Introduction to Computer Engineering II	3.0
ECE 240	Introduction to Software Engineering	3.0
EGR 283	Introduction to Algorithmic Design II	3.0
	Subtotal	18.0
	<b>Total Credit Hours:</b>	71.0

## ENGINEERING FUNDAMENTALS WITH A CONCENTRATION IN ELECTRICAL ENGINEERING

### **Graduation Requirements**

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR: ENGINEERING FUNDAMENTALS- CONCENTRATION IN ELECTRICAL ENGINEERING (75 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

**A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
	Approved History/Humanities	3.0
	Approved Fine Arts Course	3.0
	Approved Social/Behavioral Science Course	3.0
	Subtotal	<u>19.0</u>

**B. MAJOR COURSE REQUIREMENTS (25 CREDIT HOURS)**

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
CHM 110	College Chemistry (V)	4.0
MAT 141	Analytical Geometry and Calculus II (O, V)	4.0
MAT 240	Analytical Geometry and Calculus III	4.0
MAT 242	Differential Equations	4.0
PHY 221	University Physics I (V)	4.0
EGR 281	Introduction to Algorithmic Design (V)	4.0
	Subtotal	<u>25.0</u>

**C. ADDITIONAL COURSE REQUIREMENTS (31 CREDIT HOURS)**

		<u>Credit Hours</u>
ECE 101	Electrical and Electronics Engineering	3.0
ECE 102	Instrument Control	3.0
PHY 222	University Physics II (V)	4.0
EGR 209	Statistics for Engineers (V)	3.0
ECE 205	Electrical and Computer Lab I	3.0
ECE 211	Introduction to Computer Engineering I	3.0
ECE 212	Introduction to Computer Engineering II	3.0
ECE 221	Introduction to Electrical Engineering I (V)	3.0
ECE 222	Introduction to Electrical Engineering II	3.0
EGR 283	Introduction to Algorithmic Design II	3.0
	Subtotal	<u>31.0</u>

**Total Credit Hours: 75.0**

# ENGINEERING FUNDAMENTALS WITH A CONCENTRATION IN MECHANICAL ENGINEERING

## Graduation Requirements

In addition to college graduation requirements, students must earn a cumulative 2.0 grade point average (GPA) or better in all courses offered by the Engineering Technologies Department to be eligible for graduation.

**MAJOR: ENGINEERING FUNDAMENTALS- CONCENTRATION IN  
MECHANICAL ENGINEERING (71 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN APPLIED SCIENCE**

### A. GENERAL EDUCATION COURSE REQUIREMENTS (19 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
MAT 140	Analytical Geometry and Calculus I	4.0
	Approved History/Humanities	3.0
	Approved Fine Arts Course	3.0
	Approved Social/Behavioral Science Course	<u>3.0</u>
	Subtotal	19.0

### B. MAJOR COURSE REQUIREMENTS (24 CREDIT HOURS)

		<u>Credit Hours</u>
COL 101	College Orientation (V)	1.0
CHM 110	College Chemistry (V)	4.0
MAT 141	Analytical Geometry and Calculus II (O, V)	4.0
MAT 240	Analytical Geometry and Calculus III	4.0
MAT 242	Differential Equations	4.0
PHY 221	University Physics I (V)	4.0
EGR 270	Introduction to Engineering	<u>3.0</u>
	Subtotal	24.0

### C. ADDITIONAL COURSE REQUIREMENTS (28 CREDIT HOURS)

		<u>Credit Hours</u>
CHM 111	College Chemistry II (V)	4.0
ECE 221	Electrical Engineering I	3.0
EGR 260	Engineering Statics (V)	3.0
EGR 264	Introduction to Engineering Mechanics of Solids (V)	3.0
EGR 266	Engineering Thermodynamics Fundamentals	3.0
EGR 274	Engineering Applications of Numerical Methods	3.0
EGR 275	Introduction to Engineering/Computer Graphics (V)	3.0
EGR 262	Engineering Dynamics	3.0
EGR 268	Fluid Mechanics	<u>3.0</u>
	Subtotal	32.0

**Total Credit Hours: 71.0**

## ASSOCIATE IN SCIENCE WITH CONCENTRATION IN MATHEMATICS

The Associate in Science with a concentration in Mathematics is designed to serve students who wish to take courses to transfer into a four-year college or university that offers a baccalaureate degree with a major in Mathematics or Statistics. This two-year degree program is intended to be equivalent to the first two years of the degree requirements for the chosen major at the student's four-year college or university. The student's desired transfer institution will be the ultimate authority on course transfer and degree applicability, and the student and advisor can further refine course choices in the degree planning process.

**MAJOR: ASSOCIATE IN SCIENCE (62 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN SCIENCE  
WITH CONCENTRATION IN MATHEMATICS**

### **A. COURSES FOR DISTRIBUTION**

#### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	
OR		
SPC 209	Interpersonal Communication	3.0
Subtotal		<u>9.0</u>

#### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
OR		
ART 101	Art History and Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
ECO 210	Macroeconomics (O, V)	3.0
HIS 101	Western Civilization to 1689 (O)	
OR		
HIS 102	Western Civilization Post 1689 (O)	3.0
HIS 202	American History: 1877 to Present (O, V)	
OR		
HIS 201	American History: Discovery to 1877 (O, V)	3.0
Subtotal		<u>12.0</u>

### 3. SCIENCE (8 CREDIT HOURS)

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	
OR		
PHY 221	University Physics I (V)	4.0
CHM 111	College Chemistry II (V)	
OR		
PHY 222	University Physics II (V)	4.0
	Subtotal	<u>8.0</u>

### B. COURSES FOR MATHEMATICS CONCENTRATION (16 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
MAT 141	Analytical Geometry and Calculus II (O, V)	4.0
MAT 240	Analytical Geometry and Calculus III	4.0
MAT 242	Differential Equations	4.0
	<b>Total Mathematics Concentration Credits:</b>	<u>16.0</u>

### C. ADDITIONAL REQUIREMENTS OR ELECTIVES (17 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
MAT 111	College Trigonometry (O, V)	3.0
EGR 281	Introduction to Algorithmic Design I (V)	4.0
ECO 211	Microeconomics (O, V)	
OR		
PHI 115	Contemporary Moral Ethics (O, V)	3.0
EGR 209	Statistics for Engineers (V)	
OR		
MAT 120	Probability and Statistics (O, V)	3.0
COL 101	College Orientation (V)	1.0
	Total College-Wide Elective Credits:	<u>17.0</u>
	<b>Total Program Credit Hours:</b>	62.0

## ASSOCIATE IN SCIENCE WITH CONCENTRATION IN ACCELERATED MATHEMATICS

The Associate in Science with Concentration in Accelerated Mathematics is designed to serve students who wish to take courses to transfer into a four-year college or university that offers a baccalaureate degree with a major in Mathematics or Statistics and who enter the college prepared to start their program in more advanced mathematics classes.

**MAJOR: ASSOCIATE IN SCIENCE (64 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN SCIENCE WITH CONCENTRATION IN ACCELERATED MATHEMATICS**

## A. COURSES FOR DISTRIBUTION

### 1. COMMUNICATIONS (9 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, V, H)	
OR		
SPC 209	Interpersonal Communication	3.0
	Subtotal	<u>9.0</u>

### 2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
OR		
ART 101	Art History and Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
ECO 210	Macroeconomics (O)	3.0
HIS 101	Western Civilization to 1689 (O)	
OR		
HIS 102	Western Civilization Post 1689 (O, V)	3.0
HIS 202	American History: 1877 to the Present (O, V)	
OR		
HIS 201	American History: Discovery to 1877 (O, V)	3.0
	Subtotal	<u>12.0</u>

### 3. SCIENCE (8 CREDIT HOURS)

		<u>Credit Hours</u>
CHM 110	College Chemistry I (V)	
OR		
PHY 221	University Physics I (V)	4.0
CHM 111	College Chemistry II (V)	
OR		
PHY 222	University Physics II (V)	4.0
	Subtotal	<u>8.0</u>

## B. COURSES FOR MATHEMATICS CONCENTRATION (12 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 140	Analytical Geometry and Calculus I (O, V)	4.0
MAT 141	Analytical Geometry and Calculus II (O, V)	4.0
MAT 240	Analytical Geometry and Calculus III	4.0
MAT 242	Differential Equations	4.0
	Total Mathematics Concentration Credits:	<u>16.0</u>

**C. ADDITIONAL REQUIREMENTS OR ELECTIVES (18CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
EGR 281	Introduction to Algorithmic Design I	4.0
EGR 209	Statistics for Engineers (V)	3.0
MAT 120	Probability and Statistics (O, V)	3.0
SPA 101	Elementary Spanish I (O, V)	
OR		
FRE 101	Elementary French I	4.0
SPA 102	Elementary Spanish II (O, V)	
OR		
FRE 102	Elementary French II	4.0
COL 101	College Orientation (V)	<u>1.0</u>
	Total College-Wide Elective Credits:	19.0
	<b>Total Program Credit Hours:</b>	<b>64.0</b>

# School of Social and Behavioral Sciences



The faculty and staff of the School of Social and Behavioral Sciences are committed to educating, equipping and empowering 21st century learners. Our goal is to enrich lives by identifying and developing potential, preparing professionals for service, and promoting lifelong learning. Our courses and concentrations focus on understanding the human experience, improving the human condition, and developing critical skills applicable to a wide range of professions and careers.

Our school includes the disciplines of Anthropology, Economics, Geography, Political Science, Psychology and Sociology. Each discipline offers engaging and enriching learning experiences across a broad range of courses. Many of those courses integrate into and support the pathways offered by other schools at the college.

Those choosing an Associate in Arts degree with a concentration in the School of Social and Behavioral Sciences are preparing for transfer to four-year institutions with majors in one of the social sciences, and for vocations positively impacting lives locally, nationally and globally through professional practice, research, education, advocacy and policy development. Having a concentration in one of the social and behavioral sciences provides the foundational knowledge, skills and competencies that eventually lead to careers including:

- > Anthropology – archeologist, museum curator, ethnographer, language specialist, urban planner, product developer, investigator, park ranger
- > Geography – resource manager, policy developer, emergency manager, international aid worker, human rights advocate, regional planner
- > Sociology – sociologist, intelligence analyst, law enforcement officer
- > Political Science American Government – attorney, judge, nonprofit director, lobbyist, campaign manager, political analyst, consultant
- > Political Science International Relations – ambassador, intelligence specialist, immigration specialist, foreign service worker, international attorney, United Nations worker

- > Applied Psychology – clinical or counseling psychologist, counselor, mental health worker, market researcher, mediator, business consultant
- > Biological Psychology – neuroscientist, health psychologist, psychiatric technician, psychosocial therapist, rehabilitation counselor, researcher
- > Forensic Psychology – forensic psychologist, criminal investigator, profiler, expert witness, court consultant

*All courses are offered on campus; some are also offered Online (O), Hybrid (H) or Virtual (V).*

## **ANTHROPOLOGY**

Anthropologists assess, interpret and manage cultural resources. They investigate culture and study human evolution, variation and adaptation, along with developments of past human societies. Those choosing an Associate of Arts degree with a concentration in Anthropology begin by questioning and learning what it means to be human. They also build foundational knowledge in research, statistics, as well as cultural and biological aspects of human behavior. Anthropology students develop skills in critical thinking, problem solving and communication. The coursework prepares students with the skills and knowledge needed to succeed in upper level anthropology courses, future graduate studies, and a variety of rewarding and impactful careers in private and public arenas and in international settings.

### **CONCENTRATION: ANTHROPOLOGY (61 CREDIT HOURS)**

#### **DEGREE: ASSOCIATE IN ARTS**

#### **A. REQUIRED DISTRIBUTION (28 CREDIT HOURS)**

##### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
	Subtotal	<u>9.0</u>

##### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
SOC 101	Introduction to Sociology (O, V)	3.0
HIS 104	World History I (O)	
OR		
HIS 201	American History Discovery to 1877 (O, V)	3.0

PSY 201	General Psychology (O, V)		3.0
		Subtotal	<u>12.0</u>

### 3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)

			<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)		3.0
BIO 205	Ecology /BIO 206 Ecology Lab (O)		4.0
		Subtotal	<u>7.0</u>
<b>Total General Education Credits:</b>			28.0

### B. COURSES FOR CONCENTRATION (15 CREDIT HOURS)

			<u>Credit Hours</u>
ANT 101	General Anthropology (V)		3.0
ANT 202	Cultural Anthropology (O, V)		3.0
ANT 203	Physical Anthropology and Archeology		3.0
LNG 101	Introduction to Language		
	OR		
SPA 101	Elementary Spanish I (O, H, V)		3.0 (4.0)
PSY 203	Human Growth and Development (O, V)		3.0
<b>Total Humanities Credits:</b>			<u>15.0 (16.0)</u>

### C. ADDITIONAL REQUIREMENTS OR ELECTIVES (18 CREDIT HOURS)

			<u>Credit Hours</u>
COL 105	Freshman Seminar, (O, H, V)		3.0
PHI 101	Introduction to Philosophy (O)		3.0
PSC 205	Politics and Government		3.0
GEO 102	World Geography (O, V)		
	OR		
MAT 110	College Algebra (O, V)		3.0
ECO 201	Economic Concepts (O)		3.0
REL 101	Introduction to Religion (O)		
	OR		
REL 103	Comparative Religion (O)		
	OR		
MAT 130	College Algebra (O, V)		3.0
<b>Total College-Wide Elective Credits:</b>			<u>18.0</u>
<b>Total Program Credit Hours:</b>			61.0

## APPLIED PSYCHOLOGY

Making a positive difference in people's lives involves applying knowledge of human needs and abilities to help others solve problems and live healthy, productive and fulfilling lives. Those choosing an Associate of Arts degree with a concentration in Applied Psychology develop the knowledge and skills necessary for taking a scientific approach to understanding human behavior and mental processes, and to fostering healthy human development. They learn to identify, analyze and synthesize information

needed to communicate and work cooperatively with others from a diverse range of perspectives, attitudes and skills. The coursework prepares students with the skills and knowledge needed to succeed in upper level psychology courses, future graduate studies, and a variety of rewarding and impactful careers in mental health, education, healthcare, human services, business and industry and government settings.

## **CONCENTRATION: APPLIED PSYCHOLOGY (61 CREDIT HOURS)**

### **DEGREE: ASSOCIATE IN ARTS**

#### **A. REQUIRED DISTRIBUTION (28 CREDIT HOURS)**

##### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H)	3.0
	Subtotal	<u>9.0</u>

##### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
PSY 201	General Psychology (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
PHI 115	Contemporary Moral Ethics (O, V)	3.0
	Subtotal	<u>12.0</u>

##### **3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)**

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
BIO 101	Biological Sciences I (V)	4.0
	Subtotal	<u>7.0</u>
<b>Total General Education Credits:</b>		28.0

#### **B. COURSES FOR CONCENTRATION (15 CREDIT HOURS)**

		<u>Credit Hours</u>
PSY 203	Human Growth and Development (O, V)	3.0
PSY 212	Abnormal Psychology (H, V)	3.0
PSY 218	Behavioral Modification	3.0
PSY 220	Psychology of Personality (V)	3.0
PSY 225	Social Psychology (V)	3.0
<b>Total Humanities Credits:</b>		<u>15.0</u>

#### **C. ADDITIONAL REQUIREMENTS OR ELECTIVES (18 CREDIT HOURS)**

Credit Hours

COL 105	Freshman Seminar (O, H, V)	3.0
MAT 120	Probability and Statistics (O, V)	3.0
SOC 101	Introduction to Sociology (O, V)	3.0
HIS 102	Western Civilization Post 1689 (O)	3.0
REL 101	Introduction to Religion (O)	3.0
ANT 202	Cultural Anthropology (O, V)	<u>3.0</u>
<b>Total College-Wide Elective Credits:</b>		18.0
<b>Total Program Credit Hours:</b>		61.0

## **BIOLOGICAL PSYCHOLOGY**

The rapidly expanding fields of neuroscience, health psychology, psychoneuroimmunology, medicine and human factors research offer a range of opportunities for those having a strong foundation in biological psychology. Students choosing an Associate of Arts degree with a concentration in Biological Psychology learn to apply knowledge of the biological basis of thoughts, feelings and behavior to understanding and addressing physical, psychological and social problems. They identify, analyze and synthesize information needed to improve human health and well-being, and to develop technologies enhancing human behavior and capacity. The coursework prepares students with the skills and knowledge needed to succeed in upper level biological psychology courses, future graduate studies, and a variety of rewarding and impactful careers requiring a scientific approach to understanding and solving physical, psychological and social problems.

### **CONCENTRATION: BIOLOGICAL PSYCHOLOGY (60 CREDIT HOURS)**

#### **DEGREE: ASSOCIATE IN ARTS**

#### **A. REQUIRED DISTRIBUTION (28 CREDIT HOURS)**

##### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
Subtotal		9.0

##### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u><b>Credit Hours</b></u>
MUS 105	Music Appreciation (O, V)	
OR		
ART 101	Art History and Appreciation (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	3.0
PHI 115	Contemporary Moral Ethics (O, V)	<u>3.0</u>
Subtotal		12.0

### 3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 110	College Algebra (O, V)	3.0
BIO 101	Biological Sciences I (V)	4.0
	Subtotal	7.0
	<b>Total General Education Credits:</b>	28.0

### B. COURSES FOR CONCENTRATION (17 CREDIT HOURS)

		<u>Credit Hours</u>
BIO 102	Biological Sciences II (V)	4.0
BIO 210	Anatomy and Physiology I (V)	4.0
PSY 203	Human Growth and Development (O, V)	3.0
PSY 212	Abnormal Psychology (H, V)	3.0
PSY 218	Behavioral Modification (V)	3.0
	<b>Total Humanities Credits:</b>	17.0

### C. ADDITIONAL REQUIREMENTS OR ELECTIVES (15 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (H, V)	3.0
MAT 130	College Algebra (O, V)	3.0
SOC 101	Introduction to Sociology (O, V)	3.0
HIS 102	Western Civilization Post 1689 (O, V)	3.0
MAT 120	Probability and Statistics (O, V)	3.0
	<b>Total College-Wide Elective Credits:</b>	15.0
	<b>Total Program Credit Hours:</b>	60.0

## FORENSIC PSYCHOLOGY

Insuring public safety requires cross-disciplinary knowledge and a variety of skills applicable to careers in enforcement and investigations, as well as in judicial and correctional systems. Forensic psychologists have the training needed to assess, treat and advance research across all the systems involved in public safety. Those choosing an Associate of Arts degree with a concentration in Forensic Psychology experience coursework bringing together the biological, psychological and criminal justice principles needed to understand human behavior and motivation in the context of the legal system. They develop the knowledge and skills needed to apply psychological science to forensic evaluations, to providing expertise and guidance in judicial systems and public safety organizations. The coursework prepares students with the skills and knowledge needed to succeed in upper level forensic psychology courses, future graduate studies, and a variety of critical careers in the public safety sector, judicial and correctional systems, in psychiatric facilities, private practice and the military.

### CONCENTRATION: FORENSIC PSYCHOLOGY (61 CREDIT HOURS)

**DEGREE:           ASSOCIATE IN ARTS**

## A. REQUIRED DISTRIBUTION (28 CREDIT HOURS)

### 1. COMMUNICATIONS (9 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	3.0
	Subtotal	<u>9.0</u>

### 2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
	OR	
ART 101	Art History and Appreciation (O, V)	3.0
PSY 201	General Psychology (O, V)	3.0
HIS 102	Western Civilization Post 1689 (O, V)	3.0
PHI 115	Contemporary Moral Ethics (O, V)	3.0
	Subtotal	<u>12.0</u>

### 3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)	3.0
BIO 101	Biological Science I (V)	4.0
	Subtotal	<u>7.0</u>
	<b>Total General Education Credits:</b>	28.0

## B. COURSES FOR CONCENTRATION (15 CREDIT HOURS)

		<u>Credit Hours</u>
PSC 201	American Government (O, V)	3.0
PSY 203	Human Growth and Development (O, V)	3.0
PSY 212	Abnormal Psychology (H, V)	3.0
PSY 225	Social Psychology (V)	3.0
SOC 205	Social Problems (O, V)	3.0
	<b>Total Humanities Credits:</b>	<u>15.0</u>

## C. ADDITIONAL REQUIREMENTS OR ELECTIVES (18 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (H, V)	3.0
REL 102	Introduction to Biblical Study (O)	3.0
CRJ 101	Introduction to Criminal Justice (O, V)	3.0
CRJ 115	Criminal Law I (O, V)	3.0
CRJ 125	Criminology (O)	3.0
CRJ 220	The Judicial Process (O)	3.0
	Total College-Wide Elective Credits:	<u>18.0</u>
	<b>Total Program Credit Hours:</b>	61.0

# GEOGRAPHY

Geographers think globally. They research, decipher and interpret natural and human landscapes. Those choosing an Associate of Arts degree with a concentration in Geography learn about Earth's physical environment, and the diversity of human societies spread across our planet. They expand their global knowledge, visit environmentally and culturally significant places, develop map interpretation skills and map-making techniques. The coursework prepares students with the skills and knowledge needed to succeed in upper level geography courses, future graduate studies, and a variety of rewarding and impactful careers in natural and cultural resource management, disaster and emergency management, policy making, international aid and human rights, urban and regional planning, as well as in regional and multinational business.

## **CONCENTRATION: GEOGRAPHY (60 CREDIT HOURS)**

### **DEGREE: ASSOCIATE IN ARTS**

#### **A. REQUIRED DISTRIBUTION (28 CREDIT HOURS)**

##### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
	Subtotal	9.0

##### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
ANT 202	Cultural Anthropology (O, V)	3.0
HIS 201	American History Discover to 1877 (O, V)	
OR		
HIS 202	American History 1877 to Present (O, V)	3.0
ENG 209	World Literature II	
OR		
ENG 208	World Literature I	
OR		
ENG 210	Asian Literature	
OR		
ENG 211	African Literature	
OR		
ENG 212	Latin American Literature	<u>3.0</u>
	Subtotal	12.0

### 3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)	3.0
BIO 205	Ecology /BIO 206 Ecology Lab (O)	4.0
	Subtotal	<u>7.0</u>
<b>Total General Education Credits:</b>		28.0

### B. COURSES FOR CONCENTRATION (16 CREDIT HOURS)

		<u>Credit Hours</u>
GEO 101	Introduction to Geography (O, V)	3.0
GEO 102	World Geography (O, V)	3.0
GEO 205	Physical Geography (H)	4.0
HIS 105	World History II (O)	
OR		
HIS 104	World History I (O)	3.0
PSC 220	Introduction to International Relations	3.0
<b>Total Humanities Credits:</b>		<u>16.0</u>

### C. ADDITIONAL REQUIREMENTS OR ELECTIVES (16 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (H, V)	3.0
PHI 105	Introduction to Logic (O)	
OR		
MAT 110	College Algebra (O, V)	3.0
ANT 203	Cultural Anthropology	
OR		
MAT 130	Elementary Calculus (O, V)	3.0
SPA 101	Elementary Spanish I (O, H, V)	4.0
SOC 101	Introduction to Sociology (O, V)	
OR		
ANT 202	Cultural Anthropology (O, V)	3.0
BIO 101	Biological Science I (V)	
OR		
AST 101	Solar System Astronomy (O) (if needed)	<u>(4.0)</u>
<b>Total Additional Requirements or Elective Credits:</b>		<u>16.0</u>
<b>Total Program Credit Hours:</b>		60.0

## POLITICAL SCIENCE AMERICAN GOVERNMENT

Areas like worker rights, civil rights, poverty, national security, immigration, economic development, and environmental challenges are just some of the targets of study and practice in American Government. The Associate of Arts degree with a concentration in Political Science American Government provides a comprehensive foundation for understanding American government. The coursework prepares students so that they arrive at their transfer destinations with the skills and knowledge to succeed in upper

level Political Science courses, future graduate studies, and a variety of rewarding careers with a national and global reach and impact.

**CONCENTRATION: AMERICAN GOVERNMENT (61 CREDIT HOURS)**

**DEGREE: ASSOCIATE IN ARTS**

**A. REQUIRED DISTRIBUTION (28 CREDIT HOURS)**

**1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O, H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
Subtotal		<u>9.0</u>

**2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
OR		
ART 101	Art History and Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
SOC 101	Introduction to Sociology (O, V)	3.0
HIS 102	Western Civilization Post 1689 (O, V)	3.0
HIS 202	American History: 1877 to Present (O, V)	<u>3.0</u>
Subtotal		<u>12.0</u>

**3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)**

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)	3.0
BIO 101	Biological Science I (V)	<u>4.0</u>
Subtotal		<u>7.0</u>

**Total General Education Credits:** 28.0

**B. COURSES FOR CONCENTRATION (16 CREDIT HOURS)**

		<u>Credit Hours</u>
PSC 201	American Government (O, V)	3.0
PSC 205	Politics and Government	3.0
PSC 215	State and Local Government (O)	3.0
PSC 225	Campaigns and Elections	3.0
SPA 101	Elementary Spanish I (O, H, V)	
OR		
ECO 210	Macroeconomics (O)	<u>4.0 (3.0)</u>
<b>Total Humanities Credits:</b>		<u>16.0 (15.0)</u>

### C. COLLEGE-WIDE ELECTIVES (17 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (H, V)	3.0
PHI 105	Introduction to Logic (O)	3.0
GEO 205	Physical Geography (H)	4.0
SPA 102	Elementary Spanish II (O, H, V)	
SPA 122	Basic Proficiency in Spanish	
OR		
ENG 203	Survey of American Literature	3.0
PSY 201	General Psychology (O, V) (if needed)	3.0
	Total College-Wide Elective Credits:	<u>17.0 (16.0)</u>
	<b>Total Program Credit Hours:</b>	<b>61.0</b>

## POLITICAL SCIENCE INTERNATIONAL RELATIONS

Globalization, human rights, poverty, security, economic development, and environmental challenges are some of the targets of study and practice in international relations. The Associate of Arts degree with a concentration in Political Science International Relations provides a comprehensive foundation for understanding International Relations. The coursework prepares students so that they arrive at their transfer destinations with the skills and knowledge to succeed in upper level political science courses, future graduate studies, and a variety of rewarding careers having a global reach and broad impact.

### CONCENTRATION: INTERNATIONAL RELATIONS (61 CREDIT HOURS)

#### DEGREE: ASSOCIATE IN ARTS

#### A. REQUIRED DISTRIBUTION (28-29 CREDIT HOURS)

##### 1. COMMUNICATIONS (9 CREDIT HOURS)

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	<u>3.0</u>
	Subtotal	9.0

##### 2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (13 CREDIT HOURS)

		<u>Credit Hours</u>
MUS 105	Music Appreciation (O, V)	
OR		
ART 101	Art History and Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
HIS 102	Western Civilization Post 1689 (O, V)	3.0

HIS 202	American History: 1877 to Present (O, V)	3.0
SPA 101	Elementary Spanish I (O, H, V)	
OR		
ECO 210	Macroeconomics (O)	4.0 (3.0)
	Subtotal	13.0 (12.0)

### 3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)	3.0
BIO 101	Biological Science I (V)	4.0
	Subtotal	7.0
<b>Total General Education Credits:</b>		29.0 (28.0)

### B. COURSES FOR CONCENTRATION (15 CREDIT HOURS)

		<u>Credit Hours</u>
PSC 201	American Government (O, V)	3.0
PSC 205	Politics and Government	3.0
PSC 206	Politics of the Middle East	3.0
PSC 220	Introduction to International Relations	3.0
GEO 102	World Geography (O, V)	3.0
<b>Total Humanities Credits:</b>		15.0

### C. ADDITIONAL REQUIREMENTS OR ELECTIVES (17 CREDIT HOURS)

		<u>Credit Hours</u>
COL 105	Freshman Seminar (H)	3.0
PHI 105	Introduction to Logic (O)	3.0
GEO 205	Physical Geography (H)	4.0
SPA 102	Elementary Spanish II (O, H, V)	
OR		
ENG 209	World Literature II	4.0 (3.0)
SPA 122	Basic Proficiency in Spanish	
OR		
HIS 108	Introduction to East Asian Civilization	3.0
ANT 202	Cultural Anthropology (O, V) (if needed)	3.0
<b>Total Additional Requirements or Elective Credits:</b>		17.0 (19.0)
<b>Total Program Credit Hours:</b>		61.0 (62.0)

## SOCIOLOGY

Social health and well-being requires an understanding of how groups, organizations, networks, institutions and cultures organize and influence us. Sociologists study the construction and maintenance of societies to address social phenomena and social problems, including poverty, racism, sexism, crime, terrorism and war. Those choosing an Associate of Arts degree with a concentration in Sociology develop a sophisticated understanding of the complex social world we live in, as well as the kind of analytical and problem-solving skills needed to address today's pressing social issues and

problems. The coursework prepares students with the skills and knowledge needed to succeed in upper level sociology courses, future graduate studies, and a variety of rewarding and impactful careers across diverse fields including social services, law enforcement, education, government, business and journalism.

## **CONCENTRATION: SOCIOLOGY (62 CREDIT HOURS)**

### **DEGREE: ASSOCIATE IN ARTS**

#### **A. REQUIRED DISTRIBUTION (28 CREDIT HOURS)**

##### **1. COMMUNICATIONS (9 CREDIT HOURS)**

		<u>Credit Hours</u>
ENG 101	English Composition I (O,H, V)	3.0
ENG 102	English Composition II (O, H, V)	3.0
SPC 205	Public Speaking (O, H, V)	3.0
	Subtotal	<u>9.0</u>

##### **2. HUMANITIES/FINE ARTS/SOCIAL AND BEHAVIORAL SCIENCES (12 CREDIT HOURS)**

		<u>Credit Hours</u>
ART 101	Art History and Appreciation (O, V)	
OR		
MUS 105	Music Appreciation (O, V)	
OR		
THE 101	Introduction to Theatre (O)	3.0
SOC 101	Introduction to Sociology (O, V)	3.0
HIS 201	American History Discovery to 1877 (O, V)	3.0
HIS 102	Western Civilization Post 1689 (O, V)	3.0
	Subtotal	<u>12.0</u>

##### **3. ANALYTICAL REASONING/SCIENCE (6-7 CREDIT HOURS)**

		<u>Credit Hours</u>
MAT 120	Probability and Statistics (O, V)	3.0
BIO 205	Ecology/BIO 206 Ecology Lab (O)	4.0
	Subtotal	<u>7.0</u>
<b>Total General Education Credits:</b>		28.0

#### **B. COURSES FOR CONCENTRATION (15 CREDIT HOURS)**

		<u>Credit Hours</u>
ANT 202	Cultural Anthropology (O, V)	3.0
PSC 205	Politics and Government	3.0
SOC 205	Social Problems (O)	3.0
SOC 210	Juvenile Delinquency	3.0
SOC 220	Sociology of the Family (O)	3.0
<b>Total Humanities Credits:</b>		<u>15.0</u>

**C. ADDITIONAL REQUIREMENTS OR ELECTIVES (19 CREDIT HOURS)**

		<b><u>Credit Hours</u></b>
COL 105	Freshman Seminar (H)	3.0
PHI 105	Introduction to Logic (O)	3.0
GEO 205	Physical Geography (H)	4.0
HIS 131	African-American History 1877 to Present	3.0
PSY 201	General Psychology (O, V)	3.0
REL 101	Introduction to Religion (O)	<u>3.0</u>
	<b>Total College-Wide Elective Credits:</b>	19.0
	<b>Total Program Credit Hours:</b>	62.0

# Course Descriptions



Prerequisites and corequisites may have changed since this catalog was published. Developmental Reading courses are required if a student's reading placement test score indicates the need for RDG 100. Developmental Math courses are required if a student's math placement test score indicates the need for MAT 032 and/or MAT 152. Developmental English courses are required if a student's English placement test score indicates the need for ENG 032 and/or ENG 100. Students must discuss their placement test scores with an academic advisor before registering for any courses.

## COURSE DESCRIPTIONS

### **ACC 101 ACCOUNTING PRINCIPLES I**

**3.0 Credits**

This course introduces basic accounting procedures for analyzing, recording and summarizing financial transactions, adjusting and closing the financial records at the end of the accounting cycle, and preparing financial statements. Students identify sound ethical and personal values. (*Prerequisites: RDG 100 or equivalent placement test score.*)

### **ACC 102 ACCOUNTING PRINCIPLES II**

**3.0 Credits**

This course emphasizes managerial accounting theory and practice in basic accounting and procedures for cost accounting, budgeting, cost-volume analysis and financial statement analysis. (*Prerequisites: ACC 101 and MAT 101 or MAT 155*)

### **ACC 110 ACCOUNTING FOR ENTREPRENEURS**

**3.0 Credits**

This course is a study of the principles of financial accounting, managerial accounting, taxes, bookkeeping, accounting systems, and record keeping essential to starting and operating a new business enterprise. QuickBooks software for small business is utilized. (*Prerequisite: CPT 101 or CPT 170*)

### **ACC 111 ACCOUNTING CONCEPTS**

**3.0 Credits**

This course is a study of the basic accounting functions – collecting, recording, analyzing, and reporting information. (*Prerequisite: RDG 100*)

**ACC 124 INDIVIDUAL TAX PROCEDURES****3.0 Credits**

This course is a study of the basic income tax structure from the standpoint of the individual, including the preparation of individual income tax returns. *(Prerequisite: RDG 100)*

**ACC 150 PAYROLL ACCOUNTING****3.0 Credits**

This course introduces the major tasks of payroll accounting; employment practices; federal, state and local governmental laws and regulations; internal controls; and various forms and records. *(Prerequisite: ACC 101)*

**ACC 201 INTERMEDIATE ACCOUNTING I****3.0 Credits**

This course explores fundamental processes of accounting theory including the preparation of financial statements. Also covered are the time value of money, cash and receivables, and the valuation of inventories. Professional ethics and generally accepted accounting principles are introduced. *(Prerequisite: ACC 101)*

**ACC 202 INTERMEDIATE ACCOUNTING II****3.0 Credits**

This course covers the application of accounting principles and concepts to account evaluation and income determination, including special problems peculiar to corporations and the analysis of financial reports. Accounting for the acquisition and disposal of long-term assets and procedures for handling current and long-term liabilities are covered. *(Prerequisite: ACC 201)*

**ACC 224 BUSINESS TAXATION****3.0 Credits**

This course is an introduction to tax reporting requirements and taxation of the proprietorship, partnership, S Corporation, C Corporation, and Limited Liability Company. Some form preparation is required. *(Prerequisite: ACC 101)*

**ACC 230 COST ACCOUNTING I****3.0 Credits**

This course is a study of the accounting principles involved in job order cost systems. *(Prerequisite: ACC 102)*

**ACC 240 COMPUTERIZED ACCOUNTING****3.0 Credits**

This course is a study of using the computer to design and implement various accounting functions, including financial transactions, records, statements, reports and documents. *(Prerequisites: ACC 101 and CPT 101 or CPT 170)*

**ACC 245 ACCOUNTING APPLICATIONS****3.0 Credits**

This course introduces microcomputer accounting using database software and/or electronic spreadsheets. *(Prerequisites: ACC 101 and CPT 101 or CPT 170)*

**ACC 246 INTEGRATED ACCOUNTING SOFTWARE****3.0 Credits**

This course includes the use of pre-designed integrated accounting software for accounting problems. *(Prerequisites: ACC 101 and CPT 101 or CPT 170)*

**ACC 260 AUDITING****3.0 Credits**

This course is a study of the procedures for conducting audits and investigations of various enterprises. Attention is given to the nature and purpose of auditing, auditing standards, professional conduct and ethics, auditor's legal liability and the approaches followed in performing audits of financial statements. *(Prerequisite: ACC 101)*

**ACC 265 NOT-FOR-PROFIT ACCOUNTING****3.0 Credits**

This course introduces the special accounting needs of municipalities, counties, states, the federal government and governmental agencies, and other not-for-profit organizations. *(Prerequisite: ACC 101)*

**ACC 275 SELECTED TOPICS IN ACCOUNTING****3.0 Credits**

This course provides an advanced in-depth review of selected topics in accounting using case studies and individual and group problem solving. This course provides students with topics and information to prepare for the Enrolled Agent Exam (Tax Preparation). *(Prerequisites: ACC 124 and ACC 224)*

**ACC 291 CERTIFIED BOOKKEEPER REVIEW****3.0 Credits**

This course is designed to help students prepare for the Certified Bookkeeper Exam. The exam is published by the National Association for Bookkeepers to award the Certified Bookkeeper designation. *(Prerequisites: ACC 201 and ACC 150)*.

**ACR 101 FUNDAMENTALS OF REFRIGERATION****5.0 Credits**

This course covers the refrigeration cycle, refrigerants, pressure-temperature relationship, and system components. *(Prerequisite: RDG 100) (Corequisites: ACR 102, ACR 106 - DAY; ACR 102 - NIGHT)*

**ACR 102 TOOLS AND SERVICE TECHNIQUES****3.0 Credits**

This course is a basic study of the tools and service equipment used in the installation and repair of HVAC equipment. *(Prerequisite: RDG 100) (Corequisites: ACR 101, ACR 106 - DAY; ACR 101 - NIGHT)*

**ACR 106 BASIC ELECTRICITY FOR HVAC/R****4.0 Credits**

This course includes a basic study of electricity, including Ohm's Law and series and parallel circuits, as they relate to heating, ventilating, air conditioning and/or refrigeration systems. *(Prerequisite: RDG 100) (Corequisites: ACR 101, ACR 102 - DAY)*

**ACR 110 HEATING FUNDAMENTALS****4.0 Credits**

This course covers the basic concepts of oil, gas and electric heat, their components and operation. *(Prerequisites: ACR 101, ACR 102, ACR 106) (Corequisite: ACR 120)*

**ACR 120 BASIC AIR CONDITIONING****4.0 Credits**

This course is a study of various types of air conditioning equipment including electrical components, schematics and service to the refrigerant circuit. *(Prerequisites: ACR 101, ACR 106) (Corequisite: ACR 110)*

**ACR 130 DOMESTIC REFRIGERATION****4.0 Credits**

This course is a study of domestic refrigeration equipment. *(Prerequisites: ACR 101, ACR 102, ACR 106) (Corequisite: ACR 131)*

**ACR 131 COMMERCIAL REFRIGERATION****4.0 Credits**

This course is a study of maintenance and repair of commercial refrigeration systems. *(Prerequisites: ACR 101, ACR 102, ACR 106) (Corequisite: ACR 130 - DAY)*

- ACR 206 ADVANCED ELECTRICITY FOR HVAC/R** **2.0 Credits**  
 This course includes a practical application of electrical and electronic components and circuits used to control HVAC and/or refrigeration systems. *(Prerequisites: ACR 110, ACR 120, ACR 210, ACR 250)*
- ACR 207 ADVANCED REFRIGERATION ELECTRICITY** **3.0 Credits**  
 This course covers the theory and application of electrical circuits and starting components in commercial and industrial refrigeration. *(Prerequisites: ACR 130, ACR 131)*
- ACR 210 HEAT PUMPS** **4.0 Credits**  
 This course is a study of the theory and operational principles of the heat pump. *(Prerequisites: ACR 110, ACR 120) (Corequisite: ACR 250)*
- ACR 220 ADVANCED AIR CONDITIONING** **4.0 Credits**  
 This course is an advanced study of air conditioning systems. *(Prerequisites: ACR 110, ACR 120, ACR 210, ACR 250)*
- ACR 221 RESIDENTIAL LOAD CALCULATIONS** **2.0 Credits**  
 This course is a study of heat losses/gains in residential structures. *(Prerequisites: ACR 110, ACR 120, ACR 210, ACR 250)*
- ACR 224 CODES AND ORDINANCES** **2.0 Credits**  
 This course covers instruction on how to reference appropriate building codes and ordinances when they apply to installation of heating and air conditioning equipment. *(Prerequisites: ACR 110, ACR 120, ACR 210, ACR 250)*
- ACR 231 ADVANCED REFRIGERATION** **4.0 Credits**  
 This course is an in-depth study of commercial and industrial refrigeration equipment. *(Prerequisites: ACR 130, ACR 131)*
- ACR 232 REFRIGERATION, CALCULATION AND EQUIPMENT SELECTION** **3.0 Credits**  
 This course involves a study of load calculations and selection of refrigeration equipment and components. *(Prerequisites: ACR 130, ACR 131)*
- ACR 250 DUCT FABRICATION** **3.0 Credits**  
 This course covers the design, fabrication, and installation of air duct systems *(Prerequisites: ACR 110, ACR 120) (Corequisite: ACR 210)*
- AET 101 BUILDING SYSTEMS I** **3.0 Credits**  
 This course is a study of the fundamental concepts of design and construction techniques in residential, commercial, and industrial buildings. *(Prerequisite: MAT 101 or MAT 152)*
- AET 103 INTERNATIONAL BUILDING AND RESIDENTIAL CODES** **3.0 Credits**  
 This course is an introduction to the international building codes and the international residential codes, as well as local code requirements. *(Prerequisite: MAT 101 or MAT 152)*

- AET 105 CONSTRUCTION DOCUMENTS** **3.0 Credits**  
This course covers the interpretation of residential, commercial, and industrial building construction documents, including construction specifications, general conditions, and construction industry symbols. *(Prerequisite: ENG 100)*
- AET 110 ARCHITECTURAL GRAPHICS I** **3.0 Credits**  
This course is an introduction to the skills of architectural manual drafting. The principles of architectural design and model construction are also studied. *(Prerequisite: MAT 152)*
- AET 120 ARCHITECTURAL GRAPHICS II** **3.0 Credits**  
This course requires the production of a set of working drawings of a residential or commercial building. Exercises incorporate construction methods, materials, building code requirements, site development, and the technical skills required to draw and graphically present projects. This course is also a further study of architectural design. Perspective construction is introduced. *(Prerequisite: AET 110 or AET 123)*
- AET 123 ARCHITECTURAL DRAFTING** **3.0 Credits**  
This course provides an introduction to the principles of architectural planning and design with an emphasis on residential and light commercial construction. *(Prerequisite: MAT 152)*
- AET 201 BUILDING SYSTEMS II** **3.0 Credits**  
This course covers mechanical systems, electrical systems and code requirements for residential, commercial, and industrial buildings. *(Prerequisite: AET 101)*
- AET 202 HISTORY OF ARCHITECTURE** **3.0 Credits**  
This course is a study of the origins, influences and aesthetics that underlie the various styles of architecture from prehistoric times to the present. *(Prerequisite: AET 101)*
- AET 221 ARCHITECTURAL COMPUTER GRAPHICS II** **4.0 Credits**  
This course includes a study of CAD commands with architectural applications and routines. A complete set of working drawings of a residential or commercial building using the computer as a drafting tool is produced. *(Prerequisite: AET 110 or AET 123)*
- AET 230 ARCHITECTURAL GRAPHICS III** **4.0 Credits**  
This course encompasses a model and set of working drawings of a complex architectural project. *(Prerequisites: AET 120, AET 221)*
- AET 235 ARCHITECTURAL THREE-D RENDERING** **3.0 Credits**  
Topics in this course includes Three-D rendering of residential and commercial buildings, walk-through animations, animated site plans and advanced graphics topics and their relationship to illustration of code compliance and project planning. *(Prerequisite: AET 221)*
- AHS 102 MEDICAL TERMINOLOGY** **3.0 Credits**  
This course covers medical terms, including roots, prefixes and suffixes, with emphasis on spelling, definition and pronunciation. *(Prerequisites: ENG 100, RDG 100 with a minimum grade of "C")*

- AHS 106 CARDIOPULMONARY RESUSCITATION** **1.0 Credit**  
This course provides a study of the principles of cardiopulmonary resuscitation. *(Prerequisite: RDG 100)*
- AHS 113 HEAD AND NECK ANATOMY** **1.0 Credit**  
This course provides a detailed study of the structure of the head and neck with special emphasis on structure as it pertains to the study of dental science. *(Prerequisite: acceptance into DHG Phase II) (Corequisites: DHG 151, DHG 125)*
- AHS 117 THE CARE OF PATIENTS** **4.0 Credits**  
This course introduces basic nursing skills, which are applied in long-term care. This course provides clinical instruction and practice of basic nursing skills required of nursing assistants employed in skilled nursing facilities and extended care facilities. The course emphasizes care of the older adult client, assistance with activities of daily living, bathing, dressing, exercise movement, eating, elimination, safety measures, cardiopulmonary resuscitation, and rehabilitation techniques. This course meets the State Department of Health and Human Services requirements for eligibility to take the National Nurse Aide Assessment Program (NNAAP) Examination in South Carolina.
- AHS 127 BASIC PATIENT CARE** **3.0 Credits**  
This course is a study of basic procedures for patient care for health professionals including vital signs, patient transport, patient care relations and patient communications. *(Prerequisite: AHS 102)*
- AHS 128 HEALTH SCIENCES INTRODUCTION** **4.0 Credit**  
This course is a study of the core competencies common to numerous health science professions. *(Prerequisite: AHS 102)*
- AHS 131 COMPUTERS IN HEALTHCARE** **3.0 Credits**  
This course is the study of hardware and software used in various healthcare setting including information systems, computerized medical interfaces, telemedicine, networking, as well as other basic computer applications. *(Prerequisites: AHS 102)*
- AHS 141 PHLEBOTOMY FOR THE HEALTH CARE PROVIDER** **3.0 Credits**  
This course contains the essential theory, skills, and special procedures required to meet the venipuncture needs in hospital, clinics, and other health care settings. *(Prerequisites: AHS 102; BIO 112 or BIO 211 with minimum grade of "C")*
- AHS 142 PHLEBOTOMY** **2.0 Credits**  
This course is a study of phlebotomy procedures utilized in clinical facilities and physicians' offices. *(Prerequisites: AHS 141, Permission of Program Coordinator)*
- AHS 145 ELECTROCARDIOGRAPHY** **2.0 Credits**  
This course provides the basic skills necessary to perform ECGs in a hospital, physician's office or other health care setting. The student will be able to perform and interpret basic ECGs. *(Prerequisites: AHS 102; BIO 110 or BIO 112 or BIO 211 with minimum grade of "C")*

- AHS 156 ELECTROCARDIOGRAPHY PRACTICUM** **1.0 Credit**  
 This course provides the detailed study and practice necessary to perform ECGs in a hospital, physician's office or other health care setting. The student will be able to perform and interpret basic ECGs. *(Corequisite: AHS 145 or permission of the Program Coordinator)*
- AHS 177 CARDIAC MONITORING APPLICATIONS** **4.0 Credits**  
 This course is a study of cardiac monitoring techniques including basic cardiovascular anatomy and physiology, electrophysiology, rhythms and dysrhythmia recognition and equipment maintenance. *(Prerequisite: Permission of Program Coordinator)*
- AHS 180 HEALTH CAREERS PREPARATION** **3.0 Credits**  
 This course includes selected topics such as study skills, test-taking skills, critical thinking, problem solving, ethics, health careers test preparation and other topics to promote student success. *(Prerequisites: RDG 100)*
- AHS 205 ETHICS AND LAW FOR ALLIED HEALTH PROFESSIONS** **3.0 Credits**  
 This course is an introduction to ethical, bioethical and legal concepts related to allied health professions. *(Prerequisites: AHS 102, AHS 128, or NUR 115)*
- AHS 206 CROSS-SECTIONAL ANATOMY FOR MEDICAL IMAGING** **2.0 Credits**  
 This course is a study of human anatomy as viewed in cross-sectional planes. This is used in medical imaging modalities such as computed tomography, Magnetic Resonance Imaging, and Ultrasound. *(Prerequisite: Acceptance to the Computed Tomography Program)*
- AMT 103 SENSORS** **3.0 Credits**  
 This course covers the theory of operation of various processes and discrete sensors used in modern industrial plants plus the techniques of interfacing these sensors with controllers (i.e., robot, work cell, programmable and process). *(Prerequisites: IMT 108, IMT 112; Corequisites: IMT 214, IMT 251)*
- AMT 105 ROBOTICS AND AUTOMATED CONTROL I** **3.0 Credits**  
 This course includes assembling, testing, and repairing equipment used in automation. Concentration is on connecting, testing, and evaluated automating controls and systems. *(Prerequisites: IMT 132, IMT 107, IMT 103)*
- AMT 160 PRINCIPLES OF QUALITY AND CONTINUOUS IMPROVEMENT** **3.0 Credits**  
 This course prepares students for an assessment leading to Manufacturing Skill Standards Council Certified Production Technician (MSSC-CPT). Students will be equipped with the skills to ensure the production and manufacturing systems meet quality system requirements a defined by business/customers. *(Prerequisites: IMT 108, IMT 112, IMT 214, IMT 251)*

- ANT 101 GENERAL ANTHROPOLOGY 3.0 Credits**  
This course is the study of physical and cultural anthropology. This course explores subfields of anthropology to examine primatology, human paleontology, human variation, archeology and ethnology. *(Prerequisites: RDG 100, ENG 032)*
- ANT 202 CULTURAL ANTHROPOLOGY 3.0 Credits**  
This course includes an exploration and comparison of selected contemporary cultures, including their languages. The course also includes an introduction to the concepts, methods, and data of socio-cultural anthropology and anthropological linguistics. *(Prerequisites: RDG 100, ENG 032)*
- ANT 203 PHYSICAL ANTHROPOLOGY AND ARCHEOLOGY 3.0 Credits**  
This course includes an exploration of human origins, human evolution, human pre-history, and cultural existence from its less complex forms to early civilizations. The course also includes an introduction to the concepts, methods, and data of physical, biological and archaeological anthropology. *(Prerequisites: RDG 100, ENG 032)*
- AOT 105 KEYBOARDING 3.0 Credits**  
This course focuses on the mastery of touch keyboarding.
- AOT 106 KEYBOARDING LAB 1 1.0 Credits**  
This lab focuses on improving keyboarding speed and accuracy. *(Prerequisite: AOT 105 or keyboarding placement)*
- AOT 107 KEYBOARDING LAB II 1.0 Credits**  
This lab focuses on improving keyboarding speed and accuracy through the use of intensive skill building drills. *(Prerequisite: AOT 105 or keyboarding placement)*
- AOT 110 DOCUMENT FORMATTING 3.0 Credits**  
This course emphasizes speed, accuracy, and developing document formatting skills using keyboarding competencies. *(Prerequisite: AOT 105 or keyboard placement test)*
- AOT 133 PROFESSIONAL DEVELOPMENT 3.0 Credits**  
This course emphasizes development of personal and professional skills required of an office worker in areas such as projecting a professional image, job seeking skills, office etiquette, ethics, and time and stress management. *(Prerequisite: RDG 100)*
- AOT 134 OFFICE COMMUNICATIONS 3.0 Credits**  
This course is a study of grammar, punctuation, and written communication skills for the office environment. *(Prerequisites: ENG 100)*
- AOT 143 OFFICE SYSTEMS AND PROCEDURES 3.0 Credits**  
This course emphasizes procedures and applications used in the office environment. *(Prerequisites: AOT 105 or keyboard placement test, RDG 100)*
- AOT 161 RECORDS MANAGEMENT 3.0 Credits**  
This course emphasizes records management functions and various types of storage methods, technology, and procedures. *(Prerequisite: RDG 100)*

- AOT 164 MEDICAL INFORMATION PROCESSING** **3.0 credits**  
This course emphasizes development of proficiency in producing medical documents typical of those used in health care settings. *(Prerequisites: AOT 105 or keyboarding placement test, ENG 100 or ESL 100, RDG 100, CPT 170)*
- AOT 180 CUSTOMER SERVICE** **3.0 Credits**  
This course is a study of issues in the workplace relating to effective customer service. The course includes topics such as oral, written, verbal and nonverbal communication skills, effective telephone techniques and cultural diversity in the workplace. *(Prerequisite: RDG 100)*
- AOT 196 OFFICE CONFIDENTIALITY AND SECURITY** **3.0 Credits**  
This course is the study of legal issues encountered in the office environment to include accessibility, interviewing, HIPPA and other rules as they apply to specific types of offices. Office security issues and basic response to crisis are also reviewed. *(Prerequisites: ENG 100, RDG 100)*
- AOT 210 DOCUMENT PRODUCTION** **3.0 Credits**  
This course emphasizes the production of documents found in typical business offices. The major focus is on productivity and excellence in document production. *(Prerequisite: AOT 110)*
- AOT 212 MEDICAL DOCUMENT PRODUCTION** **3.0 Credits**  
This course covers the production of documents found in medical offices. The major focus is on productivity and excellence in medical document production. *(Prerequisite: AOT 110)*
- AOT 234 ADMINISTRATIVE OFFICE COMMUNICATIONS** **3.0 Credits**  
This course emphasizes communication skills necessary in the business environment. It includes composing business correspondence, developing and giving oral presentations, practicing recording and translating information using the latest technology, and developing effective communication skills. *(Prerequisite: AOT 110)*
- AOT 250 ADVANCED INFORMATION PROCESSING** **3.0 credits**  
This course emphasizes complex applications of information processing software using advanced features and concepts applicable to the medical office environment. *(Prerequisites: AOT 110, AOT 164, AOT 212)*
- AOT 252 MEDICAL SYSTEMS AND PROCEDURES** **3.0 Credits**  
This course emphasizes development of proficiency in integrating skills commonly performed in medical offices. *(Prerequisite: AOT 110)*
- AOT 255 SENIOR PRACTICUM** **3.0 Credits**  
This course includes practical experience in an approved office setting as well as class meetings. Emphasis is placed on such topics as career planning, ethics, attitude, and other subjects which enhance employability skills. *(Prerequisites: AOT 110, AOT 143, AOT 161, AOT 265, CPT 172, CPT 174, CPT 179 or advisor approval)*

- AOT 265 OFFICE DESKTOP PUBLISHING** **3.0 Credits**  
This course emphasizes the integration of text and graphics using computer software to design, edit, and produce a variety of documents. (*Prerequisite: CPT 179*)
- AOT 267 INTEGRATED INFORMATION PROCESSING** **3.0 Credits**  
This course emphasizes the application of integrated computer software. (*Prerequisites: AOT 105 or keyboard placement test, CPT 170, RDG 100*)
- AOT 271 SCWE IN ADMINISTRATIVE OFFICE TECHNOLOGY** **4.0 Credits**  
This course integrates office skills within an approved work site related to administrative office technology. (*Prerequisites: AHS 102, AOT 252, CPT 170, MED 109*)
- ART 101 ART HISTORY AND APPRECIATION** **3.0 Credits**  
This is an introductory course to the history and appreciation of art, including the elements and principles of the visual arts. (*Prerequisite: RDG 100*)
- ART 105 FILM AS ART** **3.0 Credits**  
This course provides an introduction to the appreciation of film and covers the elements and principles of cinema with historical and contemporary examples. (*Prerequisites: RDG 100, ENG 100*)
- ART 107 HISTORY OF EARLY WESTERN ART** **3.0 Credits**  
This course is a visual and historical survey of western art from the Paleolithic Age to the Renaissance. The techniques, forms, and expressive content of paintings, sculptures and architectures are studied within the context of the cultural environments that produced them. (*Prerequisite: RDG 100*)
- ART 108 HISTORY OF WESTERN ART** **3.0 Credits**  
This course is a visual and historical survey of western art from the Renaissance through modern times. The techniques, forms, and expressive content of paintings, sculptures and architectures will be studied within the context of the cultural environments that produced them. (*Prerequisite: RDG 100*)
- ART 111 BASIC DRAWING I** **3.0 Credits**  
This course provides an introduction to the materials and the basic techniques of drawing. (*Prerequisite: RDG 100*)
- ART 112 BASIC DRAWING II** **3.0 Credits**  
This course covers a study of the materials and basic techniques of drawing. (*Prerequisite: RDG 100*)
- ART 121 2D DESIGN FUNDAMENTALS** **3.0 Credits**  
This foundation course covers the visual elements and principles of design including color theory. Projects in a variety of media focus on compositional organization and the development of design skills. (*Prerequisites: RDG 100; ENG 100, ART 101*)
- ART 122 3D DESIGN FUNDAMENTALS** **3.0 Credits**  
This foundation course introduces students to 3-D concepts and basic sculptural materials. Projects address a variety of design problems unique to 3-D art forms. (*Prerequisites: RDG 100; ENG 100, ART 101*)

**ART 211 INTRODUCTION TO PAINTING 3.0 Credits**

This course is an introduction to the materials and techniques of painting.

**ART 212 INTRODUCTION TO WATERCOLOR 3.0 Credits**

This course is an introduction to the transparent American watercolor technique, emphasizing the creation of landscapes and still-life subjects that utilize appropriate brush techniques and proper color mixing for this medium. *(Prerequisite: RDG 100)*

**ART 214 ART HISTORY STUDY ABROAD 3.0 Credits**

This course provides a study abroad experience for students studying art history. The course includes travel to selected regions outside the United States and provides a field of study of historical and contemporary art, artists, and architecture, with emphasis on art history. *(Prerequisites: RDG 100)*

**ART 220 ART LABORATORY I 1.0 Credit**

This course provides supervised participation in a museum internship. Students will receive practical experience in various technical areas tailored specifically to the needs of the assigned gallery or auction house. *(Prerequisite: RDG 100)*

**ART 221 ART LABORATORY II 1.0 Credit**

This course is the second in a sequence of courses offering supervised participation in a museum internship. Students will receive practical experience in technical areas such as exhibit design, packaging, or other curatorial duties. *(Prerequisite: RDG 100)*

**ART 222 ART LABORATORY III 1.0 Credit**

This course is the third in a sequence of courses offering supervised participation in a museum internship. Students will receive continued practical experience in various technical areas tailored specifically to the needs of the assigned gallery or auction house. *(Prerequisite: RDG 100)*

**ART 292 FOUNDATIONS FOR ART EDUCATION 3.0 Credits**

This course is the study of historical, functional, theoretical, philosophical & ethical posits of art education. It surveys standards, research, technology, diversity & legislation's impact; cognitive/artistic development; curriculum design; assessment; instructional planning and classroom management. *(Prerequisite: ENG 102)*

**ARV 121 DESIGN 3.0 Credits**

This course covers basic theories, vocabulary, principles, techniques, media and problem-solving in basic design. *(Prerequisites: RDG 100)*

**ASL 101 AMERICAN SIGN LANGUAGE I 4.0 Credits**

This course is a study of visual readiness and basic vocabulary, grammar features, and non-manual behaviors, all focusing on receptive language skill developments. *(Prerequisites: ENG 100, RDG 100)*

**ASL 102 AMERICAN SIGN LANGUAGE II 4.0 Credits**

This course is a continuation of American Sign Language I, designed to expose students to additional vocabulary, grammar features, and non-manual behaviors, all focusing on conversational skills. *(Prerequisite: ASL 101)*

- ASL 110 CAREERS IN AMERICAN SIGN LANGUAGE 2.0 Credits**  
This course will provide students with knowledge of various career options related to the field of sign language interpretation and deafness. Students will observe, research, and analyze various settings in ASL. *(Prerequisites: ENG 100, RDG 100)*
- ASL 201 AMERICAN SIGN LANGUAGE III 3.0 Credits**  
This course is a continuation of American Sign Language II and covers additional vocabulary, grammar features, and non-manual behaviors, all focusing on conversational skills. *(Prerequisite: ASL 102)*
- ASL 202 AMERICAN SIGN LANGUAGE IV 3.0 Credits**  
This course concentrates on intermediate conversational and discourse skills using American Sign Language. This course is conducted entirely using American Sign Language. *(Prerequisite: ASL 201)*
- AST 101 SOLAR SYSTEM ASTRONOMY 4.0 Credits**  
This course is a descriptive survey of the universe with emphasis on basic physical concepts and the objects in the solar system. Related topics of current interest are included in the course. *(Prerequisite: RDG 100)*
- AST 102 STELLAR ASTRONOMY 4.0 Credits**  
This course is a descriptive survey of the universe with emphasis on basic physical concepts and galactic and extra-galactic objects. Related topics of current interest are included in the course. *(Prerequisite: RDG 100)*
- AUT 105 BEGINNING ENGINE REPAIR 4.0 Credits**  
This course is a basic study of minor engine repairs, including in-frame repairs and cylinder head reconditioning. *(Prerequisites: MAT 152, RDG 100) (Corequisite: AUT 106 - DAY)*
- AUT 106 INTERMEDIATE ENGINE REPAIR 4.0 Credits**  
This course includes an application of the fundamentals of engine diagnosis and repair, including engine removal and installation procedures. *(Prerequisites: AUT 105, MAT 152, RDG 100) (Corequisite: AUT 105 - DAY)*
- AUT 112 BRAKING SYSTEMS 4.0 Credits**  
This course covers hydro-boost power brakes and vacuum power brakes as well as master cylinders and calipers rebuilding. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 221, AUT 222 - DAY)*
- AUT 115 MANUAL DRIVE TRAIN/AXLE 3.0 Credits**  
This course is a basic study of clutches, gearing and manual transmission operation, including the basic study of rear axles and rear axle setup. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 116, AUT 151, AUT 153 - DAY)*
- AUT 116 MANUAL TRANSMISSION AND AXLE 4.0 Credits**  
This course is an advanced study of manual transmissions and transaxles, including proper overhaul procedures for axles and manual transmissions and transaxles. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 115, AUT 151, AUT 153 - DAY)*

**AUT 131 ELECTRICAL SYSTEMS****3.0 Credits**

This course is a study of the individual systems and components that when combined form the entire automobile electrical system. The course includes starting and charging systems, ignition, engine, chassis, and accessory systems as well as instruction in the proper use of electrical schematics. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 133, AUT 132 - DAY)*

**AUT 132 AUTOMOTIVE ELECTRICITY****4.0 Credits**

This course is a study of electricity as used in automotive applications. This course includes DC and AC principles and their various uses in the automobile. The relationship between Ohm's law and actual automotive circuits is demonstrated. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 131, AUT 133 - DAY)*

**AUT 133 ELECTRICAL FUNDAMENTALS****3.0 Credits**

This course is a study of the theories of electricity, including magnetism, series and parallel circuits, Ohm's Law and an introduction to the use of various electrical test equipment. *(Prerequisites: MAT 100 or MAT 152, RDG 100) (Corequisites: AUT 131, AUT 132 - DAY)*

**AUT 141 INTRODUCTION TO HEATING AND AIR CONDITIONING****4.0 Credits**

This course is a basic study of the principles of heat transfer and refrigeration in automotive technology. *(Prerequisites: MAT 152, RDG 100) (Corequisite: AUT 241 - DAY)*

**AUT 145 ENGINE PERFORMANCE****3.0 Credits**

This course covers the diagnosis of various performance problems using the appropriate diagnostic equipment and diagnostic manuals. Logical thinking is also included in the course. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 245, AUT 262 - DAY)*

**AUT 151 AUTOMOTIVE TRANSMISSION/TRANSAXLE****3.0 Credits**

This course is a basic study of automotive transmission and transaxle service, including proper procedures for doing minor transmission and transaxle removal and replacement procedures. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 115, AUT 116, AUT 153 - DAY)*

**AUT 153 AUTOMATIC TRANSMISSION DIAGNOSIS****3.0 Credits**

This course is a basic study of powerflow charts and their use in diagnosing automatic transmissions, including the use of pressure testing in diagnosing automatic transmission concerns. Automatic transmission overhaul is included. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 116, AUT 151 - DAY)*

**AUT 221 SUSPENSION AND STEERING DIAGNOSIS****3.0 Credits**

This course covers the diagnosis and repair of front and rear suspension, using suspension diagnostic charts, shop manuals and alignment equipment. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 112, AUT 222 - DAY)*

- AUT 222 FOUR WHEEL ALIGNMENT** **2.0 Credits**  
This course is a review of alignment angles and adjusting procedures used in four-wheel alignment, including the use of four-wheel alignment equipment. *(Prerequisites: AUT 221, MAT 152, RDG 100) (Corequisites: AUT 112, AUT 221 - DAY)*
- AUT 241 AUTOMOTIVE AIR CONDITIONING** **4.0 Credits**  
This course is a study in the principles of refrigeration, operation and testing procedures to determine the cause of malfunction, and servicing or repairing by approved methods. Emphasis is on special tools, equipment and safety procedures. *(Prerequisites: AUT 141, or MAT 152, RDG 100) (Corequisite: AUT 141 - Day)*
- AUT 245 ADVANCED ENGINE PERFORMANCE** **5.0 Credits**  
This course includes "hands-on" diagnostics, including an in-depth study and use of the oscilloscope in diagnosing engine performance problems. *(Prerequisites: AUT 145, AUT 262, MAT 152, RDG 100) (Corequisite: AUT 145, AUT 262 - Day)*
- AUT 262 ADVANCED AUTOMOTIVE DIAGNOSIS AND REPAIR** **4.0 Credits**  
This course is an advanced study of the proper diagnostic and repair procedures required on newer computerized automobiles, including scan tool and digital multi-meter operation. *(Prerequisites: MAT 152, RDG 100) (Corequisites: AUT 145, AUT 245 - DAY)*
- BAF 101 PERSONAL FINANCE** **3.0 Credits**  
This course includes the practical applications of concepts and techniques used in managing personal finances. Major areas of study include financial planning, budgeting, credit use, housing, insurance, investments and retirement planning. *(Prerequisite: RDG 100)*
- BAF 201 PRINCIPLES OF FINANCE** **3.0 Credits**  
This is an introductory course to the field of finance. The monetary and credit systems are examined along with how the demand for funds is met in both the public and private sector. Quantitative features include financial ratios, the time value of money, capital budgeting and working capital budgeting. *(Prerequisites: ACC 101 and MAT 101 or MAT 155)*
- BCT 101 INTRODUCTION TO BUILDING CONSTRUCTION** **5.0 Credits**  
This course is an introduction to residential and light commercial construction, construction terms, tools of the trade and their safe use. *(Prerequisite: RDG 100 or equivalent placement test scores)*
- BCT 102 FUNDAMENTALS OF BUILDING CONSTRUCTION** **4.0 Credits**  
This course is a study of framing for residential and light commercial buildings. *(Prerequisite: BCT 101)*
- BCT 104 SITE LAYOUT AND PREPARATION** **2.0 Credits**  
This course is a study of principles, equipment, and methods used to perform site layouts and distance measurements. *(Prerequisite: RDG 100 or equivalent placement test scores)*

- BCT 111 BLUEPRINT READING AND SPECIFICATIONS 3.0 Credits**  
This course is an introductory study of construction plans and specifications and how they represent finished buildings. *(Prerequisite: RDG 100 or equivalent placement test scores)*
- BCT 131 ESTIMATING/QUANTITY TAKE OFF 2.0 Credits**  
This course covers construction estimation and quantity take off for construction trades based on local and national building codes. *(Prerequisite: RDG 100 or equivalent placement test scores)*
- BCT 132 INTRODUCTION TO COMMERCIAL ESTIMATING 2.0 Credits**  
This course is a study of the commercial estimating practices, techniques and software as it applies to the construction of light commercial building projects, such as school, office building, retail facilities and other buildings used by commercial businesses. *(Prerequisite: BCT 131)*
- BCT 142 FUNDAMENTALS OF CONSTRUCTION SAFETY 4.0 Credits**  
This course covers safety standards and practices as they apply to the building construction industry. *(Prerequisite: RDG 100)*
- BCT 209 CONSTRUCTION PROJECT MANAGEMENT 3.0 Credits**  
This is a course designed with projects using building construction skills. *(Prerequisites: BCT 201, BCT 102, BCT 103, BCT 212, BCT 142, BCT 221)*
- BCT 212 CONSTRUCTION METHODS AND DESIGN 3.0 Credits**  
This course covers residential construction methods and designs. *(Prerequisites: BCT 101, BCT 102, BCT 103, BCT 112, BCT 142, BCT 221)*
- BCT 221 CONSTRUCTION BUILDING CODE 3.0 Credits**  
This course is a study of local, state, and national building code requirements as they apply to residential and commercial construction. *(Prerequisite: RDG 100 or equivalent placement test scores)*
- BCT 223 RESIDENTIAL MECHANICAL SYSTEMS 3.0 Credits**  
This course is a study of the workings of the basic HVAC, electrical, and plumbing systems found in residential structures. *(Prerequisite: BCT 111)*
- BIO 101 BIOLOGICAL SCIENCE I 4.0 Credits**  
This course is a study of the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution and ecology. *(Prerequisite: RDG 100; ENG 101 recommended)*
- BIO 102 BIOLOGICAL SCIENCE II 4.0 Credits**  
This course is a study of the classification of organisms and structural and functional considerations of all kingdoms (particularly major phyla as well as viruses). Vertebrate animals and vascular plants are emphasized. *(Prerequisite: BIO 101)*

- BIO 110 GENERAL ANATOMY AND PHYSIOLOGY 3.0 Credits**  
This course is a general introduction to the anatomy and physiology of the human body. Emphasis is on the organ systems of the human and their interrelationships. *(Prerequisite: RDG 100)*
- BIO 112 BASIC ANATOMY AND PHYSIOLOGY 4.0 Credits**  
This course is a basic integrated study of the structure and function of the human body. *(Prerequisite: RDG 100; BIO 100, ENG 101 recommended)*
- BIO 115 BASIC MICROBIOLOGY 3.0 Credits**  
This is a general course in microbiology, including epidemiology and the presence, control, and identification of microorganisms. *(Prerequisite: BIO 112 or BIO 211)*
- BIO 205 ECOLOGY 3.0 Credits**  
This course introduces basic principles of population biology, ecology and environmental science as applied to the study of interactions between human kind and the biosphere. *(Prerequisite: RDG 100)*
- BIO 206 ECOLOGY LAB 1.0 Credit**  
This ecology laboratory experience consists of discussions, demonstrations, experiments, films, and field trips pertaining to the relationships of man to the biosphere, human ecology, resource use and environmental impact. *(Prerequisite: RDG 100)*
- BIO 210 ANATOMY AND PHYSIOLOGY I 4.0 Credits**  
This is the first in a sequence of courses, including an intensive coverage of the body as an integrated whole. All body systems are studied. Emphasis is placed on the manner in which systems interact to maintain homeostasis. The study includes general chemistry principles, biochemistry, cells and tissues and the following systems will be covered: integumentary, skeletal, muscular, nervous and special senses. *(Prerequisites: RDG 100; BIO 101 or 110, ENG 101 recommended)*
- BIO 211 ANATOMY AND PHYSIOLOGY II 4.0 Credits**  
This is a continuation of a sequence of courses, including intensive coverage of the body as an integrated whole. All body systems are studied. Emphasis is placed on the manner in which systems interact to maintain homeostasis. The following systems will be covered: endocrine, lymphatic, immune, circulatory, respiratory, digestive, urinary and reproductive. *(Prerequisite: BIO 210)*
- BIO 225 MICROBIOLOGY 4.0 Credits**  
This is a detailed study of microbiology as it relates to infection and the disease processes of the body. Topics include immunity, epidemiology, medically important microorganisms, and diagnostic procedures for identification. Application to clinical health will be emphasized. *(Prerequisite: BIO 101 or BIO 211)*
- BIO 240 NUTRITION 3.0 Credits**  
This course is an introduction to the essential aspects concerning the science of nutrition. Particular emphasis is on the classes of nutrients and their physiological uses in the body. Body energy requirements and the nutritional status of the world are considered. *(Prerequisite: BIO 112 or BIO 210)*

**BUS 101 INTRODUCTION TO BUSINESS****3.0 Credits**

This course is a study of the nature of business activity in relation to the economic society, including how a business is owned, organized, managed, and controlled. *(Prerequisite: RDG 100)*

**BUS 116 BUSINESS OPPORTUNITY ANALYSIS****3.0 Credits**

This course introduces the research process as it relates to business development. Students will examine effective research strategies, and explore major electronic and print resources that are available to research a business idea. This is the capstone course for the Entrepreneurship Certificate. *(Prerequisites: BUS 131)*

**BUS 121 BUSINESS LAW I****3.0 Credits**

This course is a study of legal procedures, law and society, classifications and systems of law, the tribunals administering justice and their actions, contracts, sales, transfer of titles, rights and duties of the parties, conditions, and warranties. *(Prerequisite: RDG 100)*

**BUS 130 BUSINESS COMMUNICATIONS****3.0 Credits**

This course covers the application of communication skills to situations routinely encountered in business environments. Students will generate oral and written reports and presentations. *(Prerequisite: ENG 101)*

**BUS 131 ENTREPRENEURIAL LEADERSHIP****3.0 Credits**

This course is designed to provide students with the entrepreneurial leadership perspective necessary for a business owner, economic and social contexts of entrepreneurialism, traits of historically successful entrepreneurs, and analyzes the adversity of modern-day entrepreneurs. *(Prerequisite: Permission of Business Program Director)*

**BUS 180 SOCIAL MEDIA IN BUSINESS****3.0 Credits**

This course is a study of social media use in business. Students explore different social media outlets and interact with a variety of social media platforms that support business strategies. *(Prerequisite: MKT 140)*

**BUS 240 BUSINESS STATISTICS****3.0 Credits**

This course is a study of statistical methods related to business, including descriptive statistics, probability, binomial and normal distributions, and hypothesis testing. *(Prerequisites: RDG 100, MAT 102)*

**BUS 250 INTRODUCTION TO INTERNATIONAL BUSINESS****3.0 Credits**

This is a survey course in international business designed to enhance the global perspective of business students. Emphasis is placed on the legal, cultural, economic and political factors faced in operating an international business. *(Prerequisite: BUS 101)*

**BUS 275 BUSINESS INTERNSHIP****3.0 Credits**

This course includes practical experiences in an approved business setting in conjunction with regular class meetings. The class sessions will be devoted to discussing topics that will enhance the student's employability skills. Internships are available for Accounting, Management and Marketing. This course may be taken as a substitution for the capstone course of the Marketing degree. *(Prerequisite: Permission of Accounting or Business Program Director - Applications and resumes required).*

**CET 105 SURVEYING I****3.0 Credits**

This course includes surveying theory and practice; care and use of instruments; traversing procedures; and computation of closure. Also included in this course are differential and trigonometric leveling and computation of the area of real property. *(Prerequisite: MAT 110)*

**CET 120 CONSTRUCTION MATERIALS****3.0 Credits**

This course includes a study of basic materials used in construction, including research of building product specifications. *(Prerequisite: MAT 152)*

**CET 205 SURVEYING II****4.0 Credits**

This course includes electro-optical instrumentation techniques and complex computations used in surveying. Also included are field astronomy, highway curves and topographic surveying. *(Prerequisite: CET 105; Corequisite: CET 251)*

**CET 216 SOIL MECHANICS****3.0 Credits**

This course covers soil types, their engineering properties, and techniques of field and laboratory identification and testing. Also covered is analysis and design of soil-related structures, including spread footings and retaining walls. *(Prerequisite: EGR 194)*

**CET 218 HYDRAULICS****3.0 Credits**

This course includes the fundamentals of flow, control, disposal of water, and flow through open and closed conduits, orifices, and weirs. *(Prerequisite: MAT 111)*

**CET 220 CONCRETE AND STEEL DESIGN****3.0 Credits**

This course covers the study of reinforced concrete and steel structural components according to the ACI codes and AISC specifications. *(Prerequisite: EGR 194)*

**CET 235 CONSTRUCTION METHODS AND ESTIMATING****3.0 Credits**

This course covers basic construction techniques with emphasis on cost estimating. This course includes quantity takeoff and tabulation of data using spreadsheet format. Oral and written presentations are included. *(Prerequisite: MAT 110)*

**CET 246 ENVIRONMENTAL SYSTEMS TECHNOLOGY****3.0 Credits**

This course covers a study of the sources, treatment, collection and distribution of water and waste water. Also included are water and sewer pipe hydraulics and loads on buried pipes. *(Prerequisite: CET 218)*

**CET 251 HIGHWAY DESIGN****3.0 Credits**

This course covers a study of the design and construction of a highway. Topics include geometric design, earthwork computations and drainage. *(Corequisite: CET 205)*

**CGC 101 INTRODUCTION TO GRAPHIC TECHNIQUES****3.0 Credits**

This course covers the processes of printed reproduction with an emphasis on offset printing. A variety of printing equipment and operating techniques are included. *(Prerequisites: RDG 100, MAT 152; Corequisite: CGC 111)*

- CGC 105 BASIC PHOTOGRAPHY** **3.0 Credits**  
This course covers the fundamentals of the photographic process, including principles of picture composition, camera operation, and darkroom techniques. *(Prerequisite: RDG 100)*
- CGC 106 TYPOGRAPHY I** **3.0 Credits**  
This course covers typography and photocomposition. *(Prerequisites: CGC 101, CGC 110)*
- CGC 111 IMAGING FOR THE GRAPHICS INDUSTRY** **3.0 Credits**  
This is an introductory course to the fundamentals of the software and hardware used in the production of images for the graphics industry. This course will include typography and layout. *(Corequisite: CGC 101)*
- CGC 112 IMAGING FOR THE GRAPHICS INDUSTRY II** **3.0 Credits**  
This course is an extension of CGC 111 and will build student knowledge using a variety of software and hardware used in the production of images for the graphics industry. *(Prerequisites: CGC 111, CGC 101)*
- CGC 120 GRAPHIC PROCESSES** **3.0 Credits**  
This course is an introductory course that will cover a variety of output processes for graphic arts production. *(Prerequisites: CGC 111, CGC 101)*
- CGC 132 SCREEN PRINTING** **3.0 Credits**  
This course covers an introduction to screen printing terminology, equipment, and processes. *(Prerequisites: ENG 032, RDG 100)*
- CGC 135 COMMERCIAL GRAPHICS OPERATIONS** **3.0 Credits**  
This course is a study of customer service, cost factors, quality issues, and daily operations associated with the commercial graphics industry. *(Prerequisites: CGC 101, CGC 110)*
- CGC 140 INDUSTRY EXPLORATION** **3.0 Credits**  
This course explores the various opportunities in the graphic arts industry through tours, guest speakers and research topics.
- CGC 211 DIGITAL ART CREATION** **3.0 Credits**  
This course covers basic image creation software used in the graphics industry for the production of images. *(Prerequisites: CGC 111, CGC 101)*
- CGC 212 DIGITAL ART MANIPULATION** **3.0 Credits**  
This course covers digital image manipulation software used in the graphics industry for the production of graphic images. *(Prerequisite: CGC 211)*
- CGC 220 GRAPHIC PROCESSES II** **3.0 Credits**  
This course is an intermediate course that builds student knowledge and will cover a variety of output processes for graphic arts production. *(Prerequisite: CGC 120)*
- CGC 226 ADVANCED PRINTING** **3.0 Credits**  
This course covers a variety of advanced printing projects. *(Prerequisites: CGC 122, CGC 206)*

- CGC 228 DIGITAL IMAGE ASSEMBLY** **3.0 Credits**  
This course is an in-depth study of the techniques necessary to assemble a various images into completed files that can be used for graphic arts production. (*Prerequisite:* CGC 212)
- CGC 240 SENIOR PROJECT IN COMMERCIAL GRAPHICS** **3.0 Credits**  
This course consists of advanced projects related to the commercial graphics industry. (*Prerequisites:* CGC 210, CGC 222)
- CGC 250 SPECIAL PROJECTS IN COMMERCIAL GRAPHICS** **3.0 Credits**  
This course consists of special projects related to the commercial graphics industry. (*Prerequisites:* CGC 122, CGC 206)
- CHM 105 GENERAL ORGANIC AND BIOCHEMISTRY** **4.0 Credits**  
This course is a study of the fundamental principles of chemistry, including atomic and molecular structure, common substances and reactions, introduction to organic chemistry and biochemistry. (*Prerequisites:* RDG 100, MAT 101 or MAT 152 or MAT 155)
- CHM 106 CONTEMPORARY CHEMISTRY I** **4.0 Credits**  
This is a survey course in Chemistry for non-science majors emphasizing basic principles. Topics include atomic and molecular structure, nuclear chemistry, formulas and nomenclature, states of matter, chemical reactions, acids and bases. Laboratory exercises emphasis applications of basic technique. (*Prerequisites:* RDG 100, MAT 102, EGR 109)
- CHM 110 COLLEGE CHEMISTRY I** **4.0 Credits**  
This is the first course in a sequence that includes the following topics: atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions, and equilibria. (*Prerequisites:* RDG 100, MAT 102)
- CHM 111 COLLEGE CHEMISTRY II  
(FOR STUDENTS CONTINUING IN CHEMISTRY)** **4.0 Credits**  
This course is a continuation of the study of atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions and equilibria. Other topics included are kinetics, thermodynamics and electrochemistry. (*Prerequisites:* CHM 110, MAT 110)
- CHM 112 COLLEGE CHEMISTRY II  
(FOR STUDENTS NOT CONTINUING IN CHEMISTRY)** **4.0 Credits**  
This course is a continuation of the study of atomic and molecular structure, nomenclature and equations, properties, reactions and states of matter, stoichiometry, gas laws, solutions and equilibria. Other topics included are organic chemistry and biochemistry. (*Prerequisites:* CHM 110 or CHM 106, MAT 110, EGR 109)
- CHM 211 ORGANIC CHEMISTRY I** **4.0 Credits**  
This is the first in a sequence of courses that includes nomenclature, structure and properties, and reaction mechanisms of basic organic chemistry. (*Prerequisite:* CHM 111 or CHM 112)

**CHM 212 ORGANIC CHEMISTRY II****4.0 Credits**

This course is a continuation of basic organic chemistry. Topics include nomenclature, structure and properties, reaction mechanisms of basic organic chemistry, biochemistry, and spectroscopy. (*Prerequisite: CHM 211*)

**CHT 110 INTRODUCTION TO ALTERNATE ENERGY TECHNOLOGY****3.0 Credits**

This course addresses the fundamentals of hydrogen fuel cells. Special emphasis is placed on energy production using biofuels, nuclear energy, and other renewable sources. Photovoltaic cells and their limitations as it relates to energy production are also discussed. (*Prerequisites: CHM 110 or CHM 106, MAT 102*)

**CHT 224 CURRENT TOPICS IN INDUSTRIAL CHEMISTRY****4.0 Credits**

This course covers topics of current interest to industrial chemists and technologists. (*Prerequisite: CHM 106 or CHM 110*)

**CHT 225 INSTRUMENTAL CHEMICAL ANALYSIS****4.0 Credits**

This course covers modern chemical instrumentation and includes analytical theory and laboratory experiments. Instruments studied include ultraviolet, visible, infrared, and atomic absorption spectrophotometers; gas chromatographs; pH meters; ion analyzers; refractometers; and polarimeters. Microcomputer use is required for verification of experimental results. (*Prerequisite: CHM 111 or CHM 112*)

**CHT 230 SURVEY IN ENGINEERING CHEMISTRY****3.0 Credits**

Topics in this course include supplement to general chemistry with emphasis on engineering applications, basic physical chemistry principles, organics and the properties of polymers, chemical nomenclature, chemical thermodynamics and other topics of interest to the chemical technician. (*Prerequisite: CHM 110 or CHM 106*)

**CHT 250 METHODS IN ANALYTICAL CHEMISTRY I****3.0 Credits**

Topics in this course include wet chemistry techniques & standard non-automated laboratory procedures used in engineering and manufacturing environments, including separations, titrations, gravimetric analysis, volumetric analysis, pH, refractive index, molecular weight & other standard procedures. (*Prerequisite: CHM 110 or CHM 106*)

**CHT 252 METHODS IN ANALYTICAL CHEMISTRY II****3.0 Credits**

Topics in this course include the theory & operation of instruments used for chemical analysis in engineering and manufacturing environments including spectroscopy, chromatography, & electrochemical analyses among others. It covers both automated and semi-automated systems, sample preparation, etc. (*Prerequisites: CHT 250, MAT 110*)

**CHT 271 CHEMICAL ENGINEERING PROCESS PRINCIPLES****4.0 Credits**

This course provides a systematic approach to quantitative descriptions of chemical engineering systems, while including quantitative relations of chemical reactions and chemical processes. (*Prerequisite: CHM 111 or CHM 112*)

**CHT 275 CHEMICAL PROCESS TECHNOLOGY****3.0 Credits**

Topics in this course include lecture & labs designed to teach systematic methods for the quantitative description of chemical engineering systems including the theory



- CPE 216 PC NETWORKING** **3.0 Credits**  
This course covers an introduction to LANs for technicians. Topics include installation and troubleshooting of small local area networks. (*Prerequisite: CPE 215*)
- CPE 220 COMPUTER OPERATING SYSTEMS** **3.0 Credits**  
This course covers the operation of the operating system and its use in analyzing a computer system. (*Prerequisites: RDG 100, MAT 152*)
- CPE 224 SYSTEM TROUBLESHOOTING** **3.0 Credits**  
This course covers the tools and techniques used in troubleshooting computer systems, fault isolation in computer systems by using logical analysis of systems, and test equipment indications. (*Prerequisite: EEM 243*)
- CPT 101 INTRODUCTION TO COMPUTERS** **3.0 Credits**  
This course covers basic computer history, theory and applications, including word processing, spreadsheets, databases, and the operating system. (*Prerequisite: RDG 100*)
- CPT 104 INTRODUCTION TO INFORMATION TECHNOLOGY** **3.0 Credits**  
This course is a study of basic computer components and peripherals, basic computer functions, I/O concepts, storage concepts, data communications, distributed processing, and programming language concepts. (*Prerequisites: MAT 152, RDG 100*)
- CPT 114 COMPUTERS AND PROGRAMMING** **3.0 Credits**  
This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory, and input/output devices. Programming is done in a modern high-level language. (*Prerequisites: RDG 100, MAT 101 or MAT 152*)
- CPT 115 COBOL PROGRAMMING I** **3.0 Credits**  
This course introduces the nature and use of the common business-oriented language — COBOL. (*Prerequisite: CPT 101 or CPT 104*)
- CPT 136 COMPUTER PROGRAMMING Laboratory** **1.0 Credit**  
This course provides a closed lab environment for the practice of introductory programming concepts. Students will develop solutions to a variety of programs under the guidance of an instructor. (*Prerequisites: RDG 100, MAT 102*)
- CPT 170 MICROCOMPUTER APPLICATIONS** **3.0 Credits**  
This course introduces microcomputer applications software, including word processing, data bases, spreadsheets, graphs and their integration. (*Prerequisites: MAT 152, RDG 100*)
- CPT 172 MICROCOMPUTER DATA BASE** **3.0 Credits**  
This course introduces microcomputer data base concepts, including generating reports from the data base and creating, maintaining and modifying data bases. (*Prerequisite: CPT 101 or CPT 104 or CPT 170*)
- CPT 174 MICROCOMPUTER SPREADSHEETS** **3.0 Credits**  
This course introduces the use of spreadsheet software on the microcomputer. Topics include creating, editing, using formulas, using functions, and producing graphs. (*Prerequisite: CPT 101 or CPT 104 or CPT 170*)

- CPT 176 MICROCOMPUTER OPERATING SYSTEMS 3.0 Credits**  
This course covers operating systems concepts of microcomputers, including file maintenance, disk organization, batch files and subdirectory concepts. This course also provides the knowledge and skills needed to perform post-installation and day-to-day administration on tasks in a single-domain or multiple-domain Microsoft Windows NT-based network. Instruction includes: disk resources and management; tracking usage and disk space; creating and administering user and group accounts; and administering the MS Windows NT Server and Windows NT Workstation operating system in a real-world environment. *(Prerequisite: CPT 101 or CPT 170 or IST 201)*
- CPT 179 MICROCOMPUTER WORD PROCESSING 3.0 Credits**  
This course introduces microcomputer word processing. Topics include creating, editing, formatting and printing documents. *(Prerequisites: AOT 105 or equivalent, CPT 101 or CPT 104 or CPT 170)*
- CPT 180 SHELL SCRIPTING 3.0 Credits**  
This course is a study of shell scripting and emphasizes the designing, coding, and testing of scripts. This course will cover shell scripting from both the command line and the Graphical User Interface. *(Prerequisite: IST 193, IST 257)*
- CPT 185 EVENT-DRIVEN PROGRAMMING 3.0 Credits**  
This course introduces the student to the development of professional-looking, special purpose Windows applications using the graphical user interface of Windows. *(Prerequisite: CPT 236)*
- CPT 208 SPECIAL TOPICS IN COMPUTER TECHNOLOGY 3.0 Credits**  
This course focuses on changes in computer technology. Emphasis will be placed on cutting-edge technologies in networking or information systems, and the course will cover material of special interest to the student. *(Prerequisite: department chair approval)*
- CPT 209 COMPUTER SYSTEMS MANAGEMENT 3.0 Credits**  
This course examines the methods and procedures used in maintaining microcomputer systems. Topics include hardware and software installation, configuration, operations, and troubleshooting. This course also serves as foundational training in supporting the MS Windows NT operating system. Students learn to boot up, install, configure and trouble shoot the Windows NT operating system. Instruction includes how to manage system policies; file systems, how to configure protocols; NT networking services; remote access; implementing network clients; file synchronization and directory replication. *(Prerequisite: CPT 101 or CPT 170 or IST 201)*
- CPT 210 COMPUTER RESOURCE MANAGEMENT 3.0 Credits**  
This course examines the interaction of people, systems and computers. Strategic management issues unique to the information technology environment are discussed. *(Prerequisites: CPT 104 or CPT 113, IST 225)*
- CPT 215 COBOL PROGRAMMING II 3.0 Credits**  
This course emphasizes file maintenance and tables using advanced concepts in COBOL. *(Prerequisite: CPT 115)*

**CPT 220 E-COMMERCE****3.0 Credits**

This course is a study of fundamental computer and business concepts applied to the world of e-commerce.

**CPT 236 INTRODUCTION TO JAVA PROGRAMMING****3.0 Credits**

This course is an introduction to Java programming. Topics will cover Java syntax and classes for use in the development of Java applications and applets. *(Prerequisites: RDG 100, MAT 102)*

**CPT 237 ADVANCED JAVA PROGRAMMING****3.0 Credits**

This course is a study of advanced topics of the Java Programming language by building on a basic knowledge of the Java language. Topics covered will include multi-threading, Swing classes, Swing events models, advanced layout managers, the JavaBeans components model, network programming and server-side programming. *(Prerequisite: CPT 244)*

**CPT 240 INTERNET PROGRAMMING WITH DATABASES****3.0 Credits**

This course is a study of the implementation of dynamic web pages focusing on the development of web sites that interact with databases utilizing current server-side technologies along with the databases to deliver dynamic content to client browser. *(Prerequisites: CPT 185, IST 225)*

**CPT 242 DATABASE****3.0 Credits**

This course introduces data base models and the fundamentals of data base design. Topics include data base structure, data base processing, and application programs which assess a data base. *(Prerequisite: CPT 104)*

**CPT 244 DATA STRUCTURES****3.0 Credits**

This course examines data structures widely used in programming. Topics include linked lists, stacks, queues, trees, and sorting and searching techniques. *(Prerequisite: CPT 236)*

**CPT 246 INTRODUCTION TO XML****3.0 Credits**

This course is an introduction to the Extensible Markup Language (XML) and will examine how XML can be used to describe data in a structured manner for use on the World Wide Web. *(Prerequisites: IST 225, CPT 242)*

**CPT 247 UNIX OPERATING SYSTEM****3.0 Credits**

This course is a study of basic UNIX commands including the vi editor, file structures, and shell programming. *(Prerequisite: CPT 104)*

**CPT 248 UNIX ADMINISTRATION****3.0 Credits**

This course is a study of UNIX system operation procedures, administration, and networking. *(Prerequisite: CPT 247)*

**CPT 250 JAVA CERTIFICATION TOPICS****3.0 Credits**

This course examines topics that are anticipated to be on the Java programmer certification test and is intended for students seeking programming certification for the Java language. *(Prerequisite: CPT 237)*

- CPT 255 OPERATING SYSTEM FUNDAMENTALS** **3.0 Credits**  
This course examines popular operating systems of several different types of computers. Topics include command languages, utility programs, and screen design. This course also examines designing, implementing and supporting the Windows NT Server network operating system in a multi-domain enterprise environment. *(Prerequisite: CPT 209)*
- CPT 257 OPERATING SYSTEMS** **3.0 Credits**  
This course examines the theory of operating systems and how the operating system theory is implemented in current operating systems. *(Prerequisite: CPT 104)*
- CPT 260 FUNDAMENTALS OF OPERATING SYSTEMS AND WEB SERVERS** **3.0 Credits**  
This course is a study of operating techniques needed for setting up and maintaining web server. *(Prerequisites: CPT 104, IST 225, CPT 247)*
- CPT 262 ADVANCED WEB PAGE PUBLISHING** **3.0 Credits**  
This course is a study of advanced techniques in web page design and implementation. The course focuses on designing website interfaces for effective communication, navigation, visibility and accessibility. *(Prerequisite: IST 226)*
- CPT 263 ADVANCED MULTIMEDIA FOR WEB PAGES** **3.0 Credits**  
This course is a study of advanced topics in graphics, audio, and video elements to be used in the design and implementation of effective web pages. Animation, graphics editing, and graphics-based interactivity are applied to the design of website interfaces. *(Prerequisites: CPT 290, IST 225)*
- CPT 264 SYSTEMS AND PROCEDURES** **3.0 Credits**  
This course covers the techniques of system analysis, design, development, and implementation. *(Prerequisite: CPT 236)*
- CPT 267 TECHNICAL SUPPORT CONCEPTS** **3.0 Credits**  
This course is a study of technical support/help desk concepts and techniques for supporting computers and computer services. *(Prerequisites: CPT 172, CPT 174, CPT 179, CPT 168, CPT 113 or IST 220)*
- CPT 268 COMPUTER END-USER SUPPORT** **3.0 Credits**  
This course prepares students to train and support end-users. Topics include end-user support functions, developing training modules, and strategies to provide ongoing technical support. Emphasis is on solving problems with users (needs analysis, troubleshooting, and interaction with users). *(Prerequisite: CPT 267)*
- CPT 272 ADVANCED MICROCOMPUTER DATA BASE** **3.0 Credits**  
This course emphasizes accessing data bases using advanced concepts in microcomputer data base application software. Techniques include SQL, application generators, and data base programming to generate various applications. *(Prerequisite: CPT 172)*
- CPT 275 COMPUTER TECHNOLOGY SENIOR PROJECT** **3.0 Credits**  
This course includes the design, development, testing, and implementation of an instructor approved project. *(Prerequisites: CPT 104, CPT 113 or IST 220, IST 225)*

**CPT 279    ADVANCED MICROCOMPUTER WORD PROCESSING    3.0 Credits**

This course emphasizes complex applications of word processing software for the microcomputer using advanced concepts. *(Prerequisite: CPT 179)*

**CPT 282    INFORMATION SYSTEMS SECURITY    3.0 Credits**

This course is a study of the protection of information and equipment in computer systems. Topics include all aspects of systems protection, including physical security, hardware, software and communications security. Addresses technical, legal and ethical issues. *(Prerequisites: CPT 104, CPT 236, IST 225)*

**CPT 285    PC HARDWARE CONCEPTS    3.0 Credits**

This course focuses on installing and upgrading microcomputer hardware and identifying malfunctions. *(Prerequisite: RDG 100)*

**CPT 290    MICROCOMPUTER MULTIMEDIA CONCEPTS  
AND APPLICATIONS    3.0 Credits**

This course will cover introductory microcomputer multimedia concepts and applications. The course will utilize text, graphics, animation, sound, video, and various multimedia applications in the design, development, and creation of multimedia presentations. Graphics and audio files will be prepared for websites. *(Prerequisite: CPT 104)*

**CPT 293    ADVANCED MICROCOMPUTER  
MULTIMEDIA APPLICATIONS    3.0 Credits**

This course covers advanced topics for microcomputer multimedia development utilizing advanced techniques in the use of text, graphics, animation, sound, video, and compact disc. Script language programming and its use in the development of interactive multimedia presentations are included. *(Prerequisite: CPT 290)*

**CRJ 101    INTRODUCTION TO CRIMINAL JUSTICE    3.0 Credits**

This course includes an overview of the functions and responsibilities of agencies involved in the administration of justice including police organizations, court systems, correctional systems, and juvenile justice agencies. *(Prerequisites: RDG 100, ENG 032)*

**CRJ 115    CRIMINAL LAW I    3.0 Credits**

This course covers the development of criminal law in America. The basic elements of specific criminal offenses, criminal defenses, and various legal principles upon which criminal law is established are reviewed. *(Prerequisites: CRJ 101, ENG 100)*

**CRJ 125    CRIMINOLOGY    3.0 Credits**

This course is a study of the various theories of criminal causation and control, the identification of criminal typologies, and the reaction of society to crime and criminals. *(Prerequisites: CRJ 101, ENG 100)*

**CRJ 130    POLICE ADMINISTRATION    3.0 Credits**

This course is a study of the organization, administration, and management of law enforcement agencies. Students are introduced to the principles of organization and management and to concepts such as organizational behavior, planning and research, budgeting, selection and training of personnel, and coordination of services. *(Prerequisites: CRJ 101, ENG 100)*

**CRJ 210 THE JUVENILE AND THE LAW****3.0 Credits**

This course is a study of the juvenile justice system. This process is examined from initial custody to disposition, both from a historical and modern perspective. *(Prerequisites: RDG 100, ENG 032)*

**CRJ 220 THE JUDICIAL PROCESS****3.0 Credits**

This course includes an overview of the law-making function of the courts, the growth of common law, the structure and organization of the courts, court processes and procedures involved in criminal and civil cases, and the question of reform for the administration of justice. *(Prerequisites: CRJ 101, ENG 100)*

**CRJ 230 CRIMINAL INVESTIGATION I****3.0 Credits**

This course is a study of the fundamentals of interviewing witnesses and interrogating suspects. Different methods of conducting crime scene searches and methods used in investigating various crimes are studied in the course. *(Prerequisites: RDG 100, ENG 100)*

**CRJ 236 CRIMINAL EVIDENCE****3.0 Credits**

This course is a study of the established rules of evidence from arrest to release in the administration of criminal justice. *(Prerequisites: CRJ 101, ENG 100)*

**CRJ 242 CORRECTIONAL SYSTEMS****3.0 Credits**

This course is an introduction to aspects of the correctional function in criminal justice, including organization, process, procedure, incarceration and conditional release. *(Prerequisites: CRJ 101, ENG 100)*

**CRJ 244 PROBATION, PARDON AND PAROLE****3.0 Credits**

This course is a study of the development, organization, operation, and results of systems of probation and parole as substitutes for incarceration. The philosophy and methods of treatment of offenders and the operational problems and activities of the probation/parole officer are studied in the course. *(Prerequisites: RDG 100, ENG 032)*

**CRJ 246 SPECIAL PROBLEMS IN CRIMINAL JUSTICE****3.0 Credits**

In this course issues are examined within the criminal justice community/profession which are of special concern to students and practitioners because of such elements as timeliness, local concern, legalistics, or other dynamic factors of such issues. *(Prerequisites: RDG 100, ENG 100)*

**CRJ 250 CRIMINAL JUSTICE INTERNSHIP I****3.0 Credits**

This course includes practical experience in a criminal justice or private security setting. *(Prerequisites: CRJ 101, ENG 100; two other CRJ courses; 30 credit hours toward degree; approval of CRJ Program Director)*

**CRJ 281 POLICE SCIENCE I****3.0 Credits**

Course topics include but are not limited to: Introduction to Criminal Law; Courts, Crimes, and Procedures; First Amend.; Basic Patrol Operations; and Traffic Law. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks. *(Prerequisites: RDG 100)*

**CRJ 282 POLICE SCIENCE II****3.0 Credits**

Course topics include but are not limited to: Domestic Violence, Juvenile Procedures, and Victimology. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks.. (*Prerequisites: RDG 100*)

**CRJ 283 POLICE SCIENCE III****3.0 Credits**

Course topics include but are not limited to: Report Writing, Interviewing, Officer Survival, Drug Enforcement, and Crime Scene and Physical Evidence. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks.. (*Prerequisites: RDG 100*)

**CRJ 284 POLICE SCIENCE IV****3.0 Credits**

Course topics include but are not limited to: Basic Collision Investigation, Uniform Traffic Ticket, Vehicle Tactics, and Mind Armor. After successful completion of this course, students will be eligible to complete the SCCJA certification exam for these instructional blocks. (*Prerequisites: RDG 100*)

**CWE 111 COOPERATIVE WORK EXPERIENCE I****1.0 Credit**

This course includes cooperative work experience in an approved setting.

**CWE 112 COOPERATIVE WORK EXPERIENCE I****2.0 Credits**

This course includes cooperative work experience in an approved setting.

**CWE 122 COOPERATIVE WORK EXPERIENCE II****2.0 Credits**

This course includes cooperative work experience in an approved setting.

**DAT 113 DENTAL MATERIALS****4.0 Credits**

This course is a study of physical and chemical properties of matter and identification, characteristics, and manipulation of dental materials. (*Prerequisite: Acceptance into the Dental Assisting program*)

**DAT 115 ETHICS AND PROFESSIONALISM****1.0 Credit**

This course introduces a cursory history of dental assisting, professional associations, scope of service in dentistry, and ethical, legal and professional considerations. The state dental practice act is reviewed. (*Prerequisite: Acceptance into the Dental Assisting program; MAT 155 or MAT 101*)

**DAT 118 DENTAL MORPHOLOGY****2.0 Credits**

This course emphasizes the development, eruption, and individual characteristics of each tooth and surrounding structures. This course also covers the embryology and histology of the head and neck. (*Prerequisite: BIO 110*)

**DAT 121 DENTAL HEALTH EDUCATION****2.0 Credits**

This course defines the responsibilities of the dental assistant in individual and community dental health education with emphasis on the etiology of dental disease, methods for prevention, and principles of nutrition in relationship to oral health and preventive dentistry. (*Prerequisites: DAT 113, DAT 118, DAT 154*) (*Corequisite: DAT 174*)

- DAT 122 DENTAL OFFICE MANAGEMENT 2.0 Credits**  
This course provides a study of the business aspect of a dental office. It includes exposure to dental practice management software. *(Prerequisite: ENG 160 or ENG 101)*
- DAT 123 ORAL MEDICINE/ORAL BIOLOGY 3.0 Credits**  
This course presents a basic study of oral pathology, pharmacology, nutrition, and common emergencies as related to the role of the dental assistant. *(Prerequisites: BIO 110, DAT 118) (Corequisite: DAT 174)*
- DAT 127 DENTAL RADIOGRAPHY 4.0 Credits**  
This course provides the fundamental background and theory for the safe and effective use of x-radiation in dentistry. It encompasses the history of X-rays, production and uses of radiation, radiographic film, exposure factors, interpretation of radiographs and radiation hygiene. *(Prerequisites: BIO 110, DAT 118, DAT 154)*
- DAT 154 CLINICAL PROCEDURES I 4.0 Credits**  
This course includes preparation to assist a dentist efficiently in four-handed dentistry. Emphasis is on the names and functions of all dental instruments, the principles involved in their use, and the assistants' role in dental instrumentation. *(Prerequisite: PSY 201)*
- DAT 174 OFFICE ROTATIONS 4.0 Credits**  
This is an introductory course to a general office with emphasis placed on chairside assisting and office management. *(Prerequisites: DAT 113, DAT 154) (Corequisites: DAT 121, DAT 127, DAT 123, DAT 183)*
- DAT 177 DENTAL OFFICE EXPERIENCE 7.0 Credits**  
This course consists of practice in the dental office or clinic, with rotation of assignments to encompass experiences in office management and clinical experience in all areas of dentistry. *(Prerequisites: DAT 127, DAT 174)*
- DAT 183 SPECIALTY FUNCTIONS 3.0 Credits**  
This course is an introduction to dental specialties, the refinement, the roles served by assistants in the dental specialties, and the expanded legal functions for qualified assistants. *(Prerequisites: DAT 113, DAT 154) (Corequisites: DAT 174, DAT 127)*
- DHG 115 MEDICAL AND DENTAL EMERGENCIES 2.0 Credits**  
This course provides a study of the various medical/dental emergencies and appropriate treatment measures. Additionally, it includes managing medically compromised dental patients, and provides for CPR certification. *(Prerequisite: Acceptance into the Dental Hygiene Program, Admission to DHG Phase II)*
- DHG 121 DENTAL RADIOGRAPHY 3.0 Credits**  
This course provides the application of the principles of radiology with emphasis on exposing, processing, mounting, evaluating, and interpreting dental radiographs. Radiation safety is stressed. *(Prerequisite: DHG 151)*
- DHG 125 TOOTH MORPHOLOGY AND HISTOLOGY 2.0 Credits**  
This course covers the embryogenesis and histology of the head and neck structures with primary emphasis on the oral cavity. The formation, eruption patterns, and

morphology of primary and permanent dentitions are studied. (*Prerequisite: Admission to DHG Phase II*)

**DHG 140 GENERAL AND ORAL PATHOLOGY 2.0 Credits**

This course provides a correlation of basic pathologic principles to disease processes in the oral cavity. The role of the dental hygienist in early disease detection is emphasized. Diagnosis, treatment and prognosis of diseases affecting the head and neck are discussed. (*Prerequisite: DHG 175*)

**DHG 141 PERIODONTOLOGY 2.0 Credits**

This course presents a study of the principles, etiologies, classifications and treatments of periodontal disease with emphasis on the role of the dental hygienist. (*Prerequisite: DHG 151*)

**DHG 143 DENTAL PHARMACOLOGY 2.0 Credits**

This course provides a study of drugs used in dentistry. Emphasis is placed on the physical and chemical properties of the drugs, dosages and therapeutic effects, methods of administration, and indications/contraindications for the use of the drug. A study of dental anesthetics is included. (*Prerequisite: DHG 151*)

**DHG 151 DENTAL HYGIENE PRINCIPLES 5.0 Credits**

This course is a study of the principles of infection control and hazardous waste communication; instrumentation, and instrument design; operator and patient positioning; operation of basic dental equipment; patient evaluation and medical history review. (*Prerequisite: Admission to DHG Phase II*)

**DHG 161 CLINICAL DHG I FOUNDATIONS 4.0 Credits**

This course completes the basic instrumentation instruction; introduces polishing and anticaries therapies; presents periodontal health assessment and introduces the clinical setting for application of dental hygiene skills for patient care. (*Prerequisite: DHG 151*)

**DHG 175 CLINICAL DENTAL HYGIENE II 5.0 Credits**

This course provides for the continued development of the skills necessary to perform dental hygiene care. Emphasis is placed on total patient care and treatment planning. Introduction to dental hygiene supportive functions is presented. (*Prerequisite: DHG 161*)

**DHG 230 PUBLIC HEALTH DENTISTRY 3.0 Credits**

This course provides a study of oral health and the prevention of oral disease in a community. Emphasis is on assessment of community groups and dental health needs, planning, implementation, and evaluation of community programs. (*Prerequisite: DHG 175*)

**DHG 231 DENTAL HEALTH EDUCATION 1.0 Credit**

This course provides an opportunity for the dental hygiene student to present and apply dental health information to various community groups and organizations. Project implementation and evaluation are included. Public speaking concepts will be addressed in this course. (*Prerequisite: DHG 175*)

- DHG 239 DENTAL ASSISTING FOR DHG's** **2.0 Credits**  
This course introduces the dental assisting role and responsibilities. Emphasis is on four-handed dentistry, the use and manipulations of dental materials, and office management. *(Prerequisite: Acceptance into the Dental Hygiene program)*
- DHG 241 INTEGRATED DENTAL HYGIENE I** **1.0 Credit**  
This course provides for the integration of the basic and dental hygiene sciences with current concepts of clinical dental hygiene practice. Client case studies will be used to enhance clinical decision making skills. *(Prerequisite: DHG 151)*
- DHG 242 INTEGRATED DENTAL HYGIENE II** **1.0 Credit**  
This course provides for the integration of the basic and dental sciences with current dental hygiene concepts. Emphasis is placed on ethical/legal aspects of dental hygiene practice and practice management techniques. Topics dealing with evidence based practices, dental hygiene research, and transition to non-academic clinical settings will be studied. *(Prerequisite: DHG 175)*
- DHG 243 NUTRITION AND DENTAL HEALTH** **2.0 Credits**  
This course provides a study of nutrients, their nature, source and utilization. Emphasis is placed on the relationship between diet and oral health. Oral manifestations of nutritional deficiencies are also studied. *(Prerequisite: DHG 175)*
- DHG 255 CLINICAL DENTAL HYGIENE III** **5.0 Credits**  
This course provides for the development of proficiency in the clinical dental hygiene setting with emphasis on the implementation of treatment plans to meet the individual patient's oral health needs. Also included in this course are concepts and experiences with geriatric patients, introduction to recent technological advances for periodontal debridement, and pain and anxiety control for dental hygiene procedures via infiltration anesthesia and nitrous oxide sedation monitoring. *(Prerequisite: DHG 175)*
- DHG 265 CLINICAL DENTAL HYGIENE IV** **5.0 Credits**  
This course permits refinement of clinical techniques and skills, technology and current procedural practices of the dental hygienist with emphasis on self-evaluation and quality assurance. Dental ethics and jurisprudence are addressed in this course. *(Prerequisite: DHG 175)*
- ECD 101 INTRODUCTION TO EARLY CHILDHOOD** **3.0 Credits**  
This course includes an overview of growth and development, developmentally appropriate curriculum, positive guidance techniques, regulations, health, safety, and nutrition standards in early care and education. Professionalism, family/cultural values and practical applications based on historical and theoretical models in early care and education are highlighted in this course.
- ECD 102 GROWTH AND DEVELOPMENT I** **3.0 Credits**  
This course is an extensive study of philosophies and theories of growth and development of infants/toddlers. Focus is on "total" development of the child, with emphasis on physical, social, emotional, cognitive, and nutritional areas. Developmental tasks and appropriate activities are explored in the course. *(Prerequisites: RDG 100, ENG 100)*

- ECD 105 GUIDANCE-CLASSROOM MANAGEMENT 3.0 Credits**  
This course is an overview of developmentally appropriate, effective guidance and classroom management techniques for the teacher of young children. A positive pro-active approach is stressed in the course. *(Prerequisites: RDG 100, ENG 100)*
- ECD 107 EXCEPTIONAL CHILDREN 3.0 Credits**  
This course includes an overview of special needs children and their families. Emphasis is on prevalence of disorders, treatment modalities, community resources serving exceptional children, the teacher's role in mainstreaming and early identification, and on federal legislation affecting exceptional children. Includes a 30 hour lab experience. *(Prerequisite: ECD 102)*
- ECD 108 FAMILY AND COMMUNITY RELATIONS 3.0 Credits**  
This course is an overview of techniques and materials for promoting effective family/program partnerships to foster positive child development. Emphasis is on availability and accessibility of community resources and on developing appropriate communication skills. Includes an outside service learning experience. *(Prerequisites: ECD 101, ENG 101)*
- ECD 109 ADMINISTRATION AND SUPERVISION 3.0 Credits**  
This course is a study of the role and responsibilities of an early childhood administrator. Special focus is on program monetary matters, space management, curriculum, health and food services, and relations among the public, staff and parents. *(Prerequisites: ECD 101, ENG 101)*
- ECD 131 LANGUAGE ARTS 3.0 Credits**  
This course is a study of methods and materials in age-appropriate language experiences. Opportunities are provided to develop listening, speaking, prereading and prewriting skills through planning, implementation, and evaluation of media, methods, techniques and equipment. Methods of selection, evaluation, and presentation of children's literature are included. *(Prerequisites: ENG 100, RDG 100)*
- ECD 132 CREATIVE EXPERIENCES 3.0 Credits**  
In this course the importance of creativity and independence in creative expression are stressed. A variety of age-appropriate media, methods, techniques and equipment are utilized. Students plan, implement, and evaluate instructional activities. Includes a 30 hour lab experience. *(Prerequisite: ECD 102)*
- ECD 133 SCIENCE AND MATH CONCEPTS 3.0 Credits**  
This course includes an overview of pre-number and science concepts developmentally-appropriate for young children. Emphasis is on the planning, implementation, and evaluation of developmentally-appropriate activities utilizing a variety of methods and materials. *(Prerequisites: ENG 100, RDG 100)*
- ECD 135 HEALTH, SAFETY AND NUTRITION 3.0 Credits**  
This course covers a review of health/safety practices recommended for child care and includes information on common diseases and health problems. Certification preparation is provided in pediatric safety, CPR, and first aid. Guidelines and information on nutrition and developmentally-appropriate activities are also studied in the course. *(Prerequisites: RDG 100, ENG 100)*

- ECD 138 MOVEMENT AND MUSIC FOR CHILDREN** **3.0 Credits**  
This course is a study of criteria for selecting and implementing appropriate experiences to support the physical and musical development of young children. Emphasis is on the selection of materials, equipment, and related design of indoor/outdoor environments. *(Prerequisites: ENG 100, RDG 100)*
- ECD 200 CURRICULUM ISSUES IN INFANT AND TODDLER DEVELOPMENT** **3.0 Credits**  
This course is a study of infant and toddler care. Emphasis is on brain development and its implications for caring for infants and toddlers. Planning and teaching strategies as they relate to child development, curriculum and environment are included in the course. *(Prerequisites: ECD 101, ECD 102)*
- ECD 201 PRINCIPLES OF ETHICS AND LEADERSHIP IN EARLY CARE AND EDUCATION** **3.0 Credits**  
This course includes an overview of historical views on leadership and issues and challenges of leadership in early care and education. Emphasis is on current trends and issues. This course also reviews ethical principles as they relate to children, families, colleagues, and the community and society. *(Prerequisites: ECD 101, ENG 101)*
- ECD 203 GROWTH AND DEVELOPMENT II** **3.0 Credits**  
This course is an in-depth study of preschool children growing and developing in today's world. Focus is on "total" development of the child with emphasis on physical, social, emotional, cognitive, and nutritional areas of development. Developmental tasks and appropriate activities are explored in the course. *(Prerequisite: ECD 102)*
- ECD 205 SOCIALIZATION AND GROUP CARE OF INFANTS AND TODDLERS** **3.0 Credits**  
This course is the study of the socialization and group care of infants and toddlers. Emphasis is on guidance and management, understanding behavior, temperament, the importance of routines, primary care and continuity of care, and examining the elements of quality environments. *(Prerequisites: ECD 101, ECD 102)*
- ECD 207 INCLUSIVE CARE OF INFANTS AND TODDLERS** **3.0 Credits**  
This course provides an overview of the field of infants and toddlers with special needs. Emphasis will be placed on instructional strategies, adaptations, environment, inclusion, etiology, federal legislation, family partnership, multicultural considerations, and optimal development. Includes a 30 hour lab experience. *(Prerequisites: ECD 101, ECD 102)*
- ECD 210 EARLY CHILDHOOD INTERVENTION** **3.0 Credits**  
This course provides a study of a variety of intervention procedures reflecting various models, including child centered, child directed, behavioral, cognitive, and social approaches to instruction. *(Prerequisites: ENG 100, RDG 100)*
- ECD 237 METHODS AND MATERIALS** **3.0 Credits**  
This course includes an overview of developmentally-appropriate methods and materials for planning, and evaluating environments. Emphasis is on integrating divergent activities in each curriculum area. Includes a 30 hour lab experience. *(Prerequisites: ENG 101, ECD 132)*

**ECD 243 SUPERVISED FIELD EXPERIENCE I 3.0 Credits**

This course includes emphasis on planning, implementing, and evaluating scheduled programs, age appropriate methods, materials, activities, and environments of early childhood principles and practices. Includes 75 hours of classroom experience. *(Prerequisites: ECD 237 and Permission of Program Director)*

**ECD 251 SUPERVISED FIELD EXPERIENCES IN INFANTS/TODDLERS ENVIRONMENT 3.0 Credits**

This course is the study of planning, implementing, and evaluating scheduled programs, age-appropriate methods, materials, activities and environments of infants and toddlers. Includes 75 hours of classroom experience. *(Prerequisite: Permission of Program Director)*

**ECD 259 BEHAVIOR MANAGEMENT FOR SPECIAL NEEDS 3.0 Credits**

This course is an overview of understanding and managing challenging behavior in school and child care settings. It includes common causes of problem behaviors and treatment for attention disorders, making changes in the classroom, and administrative steps to help children with challenging behaviors. *(Prerequisite: ECD 102)*

**ECD 260 METHODS OF TEACHING SPECIAL NEEDS STUDENTS 3.0 Credits**

This course focuses on developmentally appropriate methods for teaching special needs students. Emphasis is on planning, implementation, and evaluation of developmentally appropriate activities utilizing a variety of methods and materials. *(Prerequisites: ECD 102, ECD 107)*

**ECE 101 ELECTRICAL AND ELECTRONICS ENGINEERING 3.0 Credits**

This course is a study of entertainment, communication, and computer technology.

**ECE 102 INSTRUMENT CONTROL 3.0 Credits**

This course is a study of automated instrument control and data acquisition. *(Prerequisite: MAT 140)*

**ECE 205 ELECTRICAL AND COMPUTER LAB I 3.0 Credits**

This course covers basic test and measurement instrumentation, basic electrical components and circuits, and technical writing using word processing. *(Prerequisites: ECE 211, ECE 221)*

**ECE 211 INTRODUCTION TO COMPUTER ENGINEERING I 3.0 Credits**

This course covers digital systems and employs basic mathematical techniques used in the design of conventional and sequential systems. *(Prerequisite: MAT 111)*

**ECE 212 INTRODUCTION TO COMPUTER ENGINEERING II 3.0 Credits**

This course applies the overall concepts of microprocessor orientation and architecture and fundamental concepts of assembly-level programming. *(Prerequisites: ECE 211, EGR 281)*

**ECE 221 INTRODUCTION TO ELECTRICAL ENGINEERING I 3.0 Credits**

This course introduces the basic concepts of circuit analysis, applying fundamental laws and principles, resistor circuits, and first and second-order linear circuits in the

time domain using calculus-based solutions where applicable. (*Prerequisite: ECE 102, MAT 141*)

**ECE 222 INTRODUCTION TO ELECTRICAL ENGINEERING II 3.0 Credits**

This course covers sinusoidal steady-state analysis of AC circuits, complex frequency analysis, Fourier series analysis and Laplace transforms. (*Prerequisites: ECE 221, MAT 242*)

**ECE 240 INTRODUCTION TO SOFTWARE ENGINEERING 3.0 Credits**

This course covers fundamentals of software design and development, software implementation strategies, object-oriented design techniques, and ethics in software development. (*Prerequisite: EGR 283*)

**ECE 245 OBJECT-ORIENTED PROGRAMMING TECHNIQUES 3.0 Credits**

This course is a study of advanced object-oriented concepts and techniques, multiple inheritance, memory management, operator overloading, polymorphism, and performance issues. (*Prerequisite: EGR 283*)

**ECO 201 ECONOMIC CONCEPTS 3.0 Credits**

This course is a study of micro- and macro-economic concepts and selected economic problems. Topics include the economizing problem and opportunity cost, supply and demand, production costs and profit maximizing behavior of business firms, economic growth, fiscal policy and budget deficits, AD-AS Model, money and monetary policy, and international trade. (*Prerequisites: RDG 100, MAT 101 or MAT 152 or MAT 155*)

**ECO 210 MACROECONOMICS 3.0 Credits**

This course includes the study of fundamental principles and policies of a modern economy to include markets and prices, national income accounting, cycles, employment theory and fiscal policy, banking and monetary controls, and the government's role in economic decisions and growth. (*Prerequisites: RDG 100, MAT 101 or MAT 152 or MAT 155*)

**ECO 211 MICROECONOMICS 3.0 Credits**

This course includes the study of the behavior of households and firms, including supply and demand, elasticity, price/input in different market structures, pricing of resources, regulations, and comparative advantage and trade. (*Prerequisites: RDG 100, MAT 101 or MAT 152 or MAT 155*)

**EDU 201 CLASSROOM INQUIRY WITH TECHNOLOGY 3.0 Credits**

This course explores teaching as a data driven, reflective practice. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university. This course includes a practicum requirement of 10 hours service/observation in public schools as designated by the instructor. (*Prerequisite: RDG 100*)

**EDU 230 SCHOOLS IN COMMUNITIES 4.0 Credits**

This course provides students with a basic understanding of the social, political, and historical aspects of diverse educational institutions in American culture with an emphasis on families, schools, and communities. Within the parameters of an approved a

articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university. (*Prerequisites: ENG 100, RDG 100*)

**EDU 241 LEARNERS AND DIVERSITY 4.0 Credits**

This course is a study of lifespan development and learning with an emphasis on individual and group diversity. The students are required to participate in a field experience. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university. (*Prerequisites: ENG 100, RDG 100*)

**EEM 117 AC/DC CIRCUITS I 4.0 Credits**

This course is a study of direct and alternating theory, Ohm's Law, and series, parallel and combination circuits. Circuits are constructed and tested. (*Prerequisite: RDG 032 or equivalent placement test scores*)

**EEM 118 AC/DC CIRCUITS II 4.0 Credits**

This course is a continuation of the study of direct and alternating current theory to include circuit analysis using mathematics and verified with electrical measurements. (*Prerequisite: RDG 032 or equivalent placement test scores*)

**EEM 140 NATIONAL ELECTRICAL CODE 3.0 Credits**

This course is a study of the national electrical code and is based on the latest codes as published by the National Fire Protection Association (NFPA). (*Prerequisite: RDG 032 or equivalent placement test scores*)

**EEM 141 RESIDENTIAL/COMMERCIAL CODES 3.0 Credits**

This course covers national electrical code (NEC), including a study in, and application of, the NEC and city and county electrical ordinances as pertaining to residential and commercial wiring. (*Prerequisite: EEM 140*)

**EEM 142 COMMERCIAL/INDUSTRIAL CODES 3.0 Credits**

This course covers national electrical code (NEC), including a study in, and application of, the NEC and city and county electrical ordinances as pertaining to commercial and industrial wiring. (*Prerequisite: EEM 141*)

**EEM 151 MOTOR CONTROLS I 4.0 Credits**

This course is an introduction to motor controls, including a study of the various control devices and wiring used in industrial processes. (*Prerequisite: EEM 165*).

**EEM 165 RESIDENTIAL/COMMERCIAL WIRING 4.0 Credits**

This course is a study of wiring methods and practices used in residential and commercial applications. (*Prerequisites: EEM 117, EEM 118*)

**EEM 166 COMMERCIAL/INDUSTRIAL WIRING 4.0 Credits**

This course is a study of wiring methods and practices in commercial and industrial applications. (*Prerequisite: EEM 165*)

- EEM 172 ELECTRICAL PRINT READING** **4.0 Credits**  
This course is a study of electrical prints as they pertain to layout, planning, and installation of wiring systems in residential, commercial and/or industrial complexes. *(Prerequisite: RDG 032 or equivalent placement test scores)*
- EEM 201 ELECTRONIC DEVICES I** **3.0 Credits**  
This course is a study of the fundamental principles of common electronic devices and circuits. Emphasis is placed on solid-state principles and applications. *(Prerequisites: EEM 117, EEM 118)*
- EEM 215 DC/AC Machines** **3.0 Credits**  
This course is a study of applications, operations and construction of DC and AC machines. *(Prerequisites: EEM 117)*
- EEM 243 INTRODUCTION TO COMPUTER SERVICING** **3.0 Credits**  
This course is an introduction to the fundamental operation and capabilities of peripheral devices. Topics such as input/output standards and interfacing to minicomputers are covered. *(Prerequisites: RDG 100, MAT 152 or equivalent placement test scores)*
- EEM 251 PROGRAMMABLE CONTROLLERS** **3.0 Credits**  
This course is an introduction to programmable control systems with emphasis on basic programming techniques. A variety of input/output devices and their applications are covered. *(Prerequisites: MAT 152, RDG 100, ENG 032)*
- EET 102 INTRODUCTION TO DATA ACQUISITION** **1.0 Credit**  
This course is the study of the basics of acquiring test and measurement data from equipment through the use of specialized computer software and instrumentation hardware, including transducers, analog/digital converters, and data logging. *(Prerequisites: RDG 100, MAT 152)*
- EET 103 INTRODUCTION TO ELECTRONICS** **3.0 Credits**  
This course is an introduction to simple linear circuits, voltage, current, resistance, ohm's law, power, AC versus DC, linear solutions to diode, transistor circuits, ideal operational amplifiers and essential terminology. *(Prerequisites: RDG 100, MAT 152)*
- EET 113 ELECTRICAL CIRCUITS I** **4.0 Credits**  
This course is a study of direct and alternating currents, covering resistance and impedance in series, parallel, and series-parallel circuits using Ohm's Law, Kirchhoff's laws, and basic circuit theorems. Circuits are analyzed using mathematics and verified using electrical instruments. *(Prerequisites: EET 102, EET 103, MAT 102)*
- EET 114 ELECTRICAL CIRCUITS II** **4.0 Credits**  
This course is a continuation of electrical circuits, including advanced network theorems. Circuits are analyzed using mathematics and verified using electrical instruments. *(Prerequisites: EET 113, EGR 110, MAT 110)*
- EET 141 ELECTRONIC CIRCUITS** **4.0 Credits**  
This course is a study of electronic circuits using discrete and integrated devices, including analysis, construction, testing and troubleshooting. *(Prerequisites: EET 113, EGR 110, MAT 110)*

- EET 210 DIGITAL INTEGRATED CIRCUITS 4.0 Credits**  
This course is a study of digital integrated circuits, including multiplexers, demultiplexers, buffers, decoders, encoders, converters, memory devices, and programmable logic devices. Circuits are modeled, constructed and tested. *(Prerequisites: EET 102, EET 103, MAT 101 or MAT 152)*
- EET 220 ANALOG INTEGRATED CIRCUITS 3.0 Credits**  
This course includes analysis, application, and experiments involving such integrated circuits as op-amps, timers and IC regulators. Circuits are modeled, constructed, and tested. *(Prerequisites: EET 141, EET 114, MAT 111)*
- EET 227 ELECTRICAL MACHINERY 3.0 Credits**  
This course is a study of AC and DC electro-mechanical energy conversion devices, theory, applications and control. Devices are tested and verified using electrical instruments. *(Prerequisite: EET 114)*
- EET 235 PROGRAMMABLE CONTROLLERS 3.0 Credits**  
This course is a study of relay logic, ladder diagrams, theory of operation and applications. Loading ladder diagrams, debugging and trouble-shooting techniques are applied to programmable controllers. *(Prerequisites: EET 251, EET 227)*
- EET 251 MICROPROCESSOR FUNDAMENTALS 4.0 Credits**  
This course is a study of binary numbers; micro-processor operation, architecture, instruction sets, and interfacing with operating systems; and applications in control, data acquisition, and data reduction and analysis. Programs are written and tested. *(Prerequisites: EET 210, EGR 110)*
- EET 255 ADVANCED MICROPROCESSORS 3.0 Credit**  
This course is a study of advanced microprocessor, controllers, and hardware/software interfacing techniques for controlling external devices. Hardware is designed and constructed, and control programs are written and tested. *(Prerequisite: EET 251)*
- EET 273 ELECTRONICS SENIOR PROJECT 1.0 Credit**  
This course includes the construction and testing of an instructor-approved project. *(Prerequisites: EET 114, EET 251, EET 141)*
- EGR 101 INTRODUCTION TO ENGINEERING TECHNOLOGY 1.0 Credits**  
This course is an introduction to computers and reporting formats common in engineering technology. *(Prerequisite: RDG 100)*
- EGR 103 PREPARATION FOR ENGINEERING TECHNOLOGY 2.0 Credits**  
This course covers the opportunities available and basic skills needed for careers in engineering technology. Topics of study include concepts and terminologies used in engineering technology, use of scientific calculators, problem solving techniques, and SI system of measurements. Students are introduced to computers and their usage as a tool in engineering technology. *(Prerequisite: RDG 100)*
- EGR 104 ENGINEERING TECHNOLOGY FOUNDATIONS 3.0 Credits**  
This problem-based course Introduces the student to fundamental concepts of electrical, mechanical, thermal, fluids, optical, and material systems related to engineering

technology. Workplace readiness skills such as laboratory safety, communications, and teamwork are integrated into the course. (*Prerequisite: RDG 100 and MAT 152*)

**EGR 110 INTRODUCTION TO COMPUTER ENVIRONMENT 3.0 Credits**

This course provides an overview of computer hardware, available software, operating systems and applications. This course also includes fundamental techniques of programming in one or more languages used in engineering technology. (*Prerequisites: ENG 100, MAT 152 or equivalent placement test score*)

**EGR 120 ENGINEERING COMPUTER APPLICATIONS 3.0 Credits**

This course includes the utilization of applications software to solve engineering technology problems. (*Prerequisite: MAT 102*)

**EGR 170 ENGINEERING MATERIALS 3.0 Credits**

This course is a study of the properties, material behaviors, and applications of materials used in engineering structures and products. (*Prerequisite: MAT 110*)

**EGR 175 MANUFACTURING PROCESSES 3.0 Credits**

This course includes the processes, alternatives and operations in the manufacturing environment. (*Prerequisites: CPT 101 or CPT 170 or EGR 120, EGT 106, MAT 110*)

**EGR 176 MANUFACTURING INDUSTRIES 3.0 Credits**

This course introduces the concepts and principles of the manufacturing industries and technologies. Plant visits supplement study of industrial organizations, economics, management, production and products.

**EGR 194 STATICS AND STRENGTH OF MATERIALS 4.0 Credits**

This course covers external and internal forces in structures and/or machines, including conditions of equilibrium, systems of force, moments of inertia and friction. It also covers the stress/strain relationships in materials. (*Prerequisite: MAT 111*)

**EGR 205 INTRODUCTION TO NUCLEAR SCIENCE 3.0 Credits**

The course is a study of mass energy relationships and the basic interactions between radiation and matter. Topics include fundamental concepts in reactor technologies, radiation protection, atomic and nuclear physics, radiation damage, thermal effects, shielding and environmental concerns. (*Prerequisite: MAT 110*)

**EGR 209 STATISTICS FOR ENGINEERS (TRANSFER COURSE) 3.0 Credits**

This course includes basic probability and statistics with applications and examples in engineering. Elementary probability, random variables and their distributions, random processes, statistical inference, linear regression, correlation and basic DOE with application to QA, reliability, and life testing. (*Prerequisite: MAT 141*)

**EGR 260 ENGINEERING STATICS (TRANSFER COURSE) 3.0 Credits**

This course is an introduction to the principles of engineering mechanics as applied to forces and force systems. The techniques of vector mathematics are employed. This course also includes a study of equilibrium of particles and rigid bodies, distributed forces, centroids and centers of gravity, moments of inertia of areas, analysis of simple structures and machines, and a study of friction. (*Prerequisite: MAT 140*)

**EGR 261 MECHANICAL ENGINEERING LABORATORY I 3.0 Credits**  
**(TRANSFER COURSE)**

This course includes labs designed to teach principles of measurement, analysis of data, and experimental planning. Also covered are written and oral presentation techniques in an engineering environment. (*Prerequisites: EGR 260, EGR 266, PHY 222, EGR 209*)

**EGR 262 ENGINEERING DYNAMICS (TRANSFER COURSE) 3.0 Credits**

This course is an introduction to the principles of engineering as applied to kinematics and kinetics of particles and rigid bodies. The techniques of vector mathematics are employed. This course also includes an emphasis on Newton's second law along with energy and momentum methods. (*Prerequisite: EGR 260*)

**EGR 264 INTRODUCTION TO ENGINEERING MECHANICS 3.0 Credits**  
**OF SOLIDS (TRANSFER COURSE)**

This course covers the relationships between external loads on solid bodies or members and the resulting internal effects and dimensional changes. Included are concepts of stress and strain, stress analysis of basic structural members, combined stress including Mohr's circle, and introductory analysis of deflection and buckling of columns. (*Prerequisites: EGR 260, MAT 240*)

**EGR 266 ENGINEERING THERMODYNAMICS FUNDAMENTALS 3.0 Credits**  
**(TRANSFER COURSE)**

This course is an introduction to the first and second laws of thermodynamics as applied to engineering systems. Definitions, work, heat, energy and first law analysis of systems and control volumes are included. (*Prerequisite: MAT 240*)

**EGR 268 FLUID MECHANICS (TRANSFER COURSE) 3.0 Credits**

This course covers principles of fluid statics and dynamics, including conservation of mass, momentum, energy, similitude and dimensional analysis, open channel flow, lift and drag forces, and introduction to turbulent flow. (*Prerequisites: EGR 260, MAT 141*)

**EGR 270 INTRODUCTION TO ENGINEERING 3.0 Credits**  
**(TRANSFER COURSE)**

This course covers the applications of computers in engineering practices, including the use of an appropriate operating system, programming in a high-level language, spread sheets, and word processing applications. (*Prerequisite: MAT 102*)

**EGR 274 ENGINEERING APPLICATION OF NUMERICAL 3.0 Credits**  
**METHODS (TRANSFER COURSE)**

This course is a calculus-based study of the application of numerical methods to the solution of engineering problems. Techniques include iterative solution techniques, methods for solving systems of equations, numerical integration, differentiation and graphical analysis. (*Prerequisite: MAT 141*)

**EGR 275 INTRODUCTION TO ENGINEERING/COMPUTER 3.0 Credits**  
**GRAPHICS (TRANSFER COURSE)**

This course is a study of basic graphical concepts needed for engineering applications. (*Prerequisites: CPT 101 or CPT 170 or EGR 270, ENG 100, MAT 102*)

- EGR 280 CHEMICAL PROCESS PRINCIPLES** **3.0 Credits**  
This course is a study of chemical process principles. Topics include material and energy balances in the chemical industry, including reactive and non-reactive systems. Properties of gases, liquids and solids are also emphasized. (*Prerequisites: CHM 110, MAT 140*)
- EGR 281 INTRODUCTION TO ALGORITHMIC DESIGN I** **4.0 Credits**  
This course integrates a presentation of concepts of object-oriented programming, including program structures, objects, code, and programming styles. (*Prerequisite: MAT 111*)
- EGR 283 INTRODUCTION TO ALGORITHMIC DESIGN II** **4.0 Credits**  
This course is a study of rigorous development of algorithms and computer programs, including elementary data structures. (*Prerequisite: EGR 281*)
- EGT 106 PRINT READING AND SKETCHING** **3.0 Credits**  
This course covers the interpretation of basic engineering drawings and sketching techniques for making multi-view pictorial representations. This course also includes an introduction to engineering technology, and an introduction to Computer-Aided Design (CAD). (*Prerequisites: ENG 100, MAT 102*)
- EGT 151 INTRODUCTION TO CAD** **3.0 Credits**  
This course covers the operation of a computer aided drafting system. The course includes interaction with a CAD station to produce technical drawings. (*Prerequisite: MAT 101 or MAT 152*)
- EGT 156 INTERMEDIATE CAD** **3.0 Credits**  
This course builds on the fundamentals of computer-aided drafting and includes such concepts as 3-D modeling and user interface customization. This course also provides the foundation for advanced computer-aided drafting concepts and applications. (*Prerequisite: EGT 106*)
- EGT 245 PRINCIPLES OF PARAMETRIC CAD** **3.0 Credits**  
This course is the study of 3D product and machine design utilizing state-of-the-art parametric design software. (*Prerequisites: MAT 102, EGR 120*)
- EGT 256 MODELING MECHANICAL SYSTEMS** **3.0 Credits**  
This course includes 3-D modeling of mechanical systems in residential structures using applicable software. (*Prerequisites: MAT 110, EGT 245*)
- EGT 257 ADVANCED CIVIL CAD** **3.0 Credits**  
This course is a study of the advanced use of CAD in the field of civil engineering. Students will complete drawing projects using concepts related to planning, data capture, and project design. (*Prerequisite: EGT 151*)
- EGT 258 APPLICATIONS OF CAD** **3.0 Credits**  
This course is the study of the use of CAD within the different drafting and design fields. Students will complete CAD projects for various fields which may include architectural, civil, mechanical, HVAC, and electrical. (*Prerequisite: EGT 106*)

**EGT 285 INTEGRATED RAPID PROTOTYPING APPLICATIONS 3.0 Credits**

This course includes generating a prototype for a real-world problem utilizing 3-D modeling and rapid prototyping technologies. *(Prerequisite: EGT 245)*

**EMS 110 EMERGENCY MEDICAL TECHNICIAN 5.0 Credits**

This is an introductory course to the health care system and the function, role and responsibility of emergency health providers within the system. Emphasis is based on legal and ethical practices and stress management. A team approach is emphasized in the study of the initial assessment and management of illness and injury.

**EMS 150 INTRODUCTION TO ADVANCED CARE 5.0 Credits**

This course covers advanced care preparatory material, trauma, advanced airway material, and shock management.

**EMS 151 PARAMEDIC CLINICAL I 2.0 Credits**

This course provides an introduction to hospital care in an emergency and trauma setting. Emphasis is placed on care for adult, obstetrical, pediatric, and behavioral patients.

**EMS 216 PRINCIPLES OF RESCUE 4.0 Credits**

This course covers concepts and skills related to the access, stabilization, packaging and removal of patients trapped in wrecked vehicles, endangered by hazardous materials, trapped by structural members, and endangered due to location.

**EMS 230 ADVANCED EMERGENCY MEDICAL CARE I 5.0 Credits**

This course provides an introduction to pre-hospital pharmacology and cardiology as they relate specifically to patient care. Emphasis is placed on the appropriate methods for patient physical exams and solicitation of medical history to maximize patient outcomes.

**EMS 231 PARAMEDIC CLINICAL II 2.0 Credits**

This course provides application of the knowledge and skills learned in the classroom to patients in the emergency department setting and in other appropriate clinical facilities

**EMS 232 PARAMEDIC INTERNSHIP I 2.0 Credits**

This course provides application of the knowledge and skills learned in the classroom using the team approach to emergency medical patients in the pre-hospital environment.

**EMS 240 ADVANCED EMERGENCY MEDICAL CARE II 5.0 Credits**

This course is a study of complex recurring emergency medical conditions that encompass all stages of the patient's life span. *(Prerequisites: ; Corequisite: EMS 242)*

**EMS 242 PARAMEDIC INTERNSHIP II 2.0 Credits**

This course provides hands-on experience for initial patient care in the pre-hospital environment and focuses on the ability to assess, care for, and transport medical and trauma patients. *(Prerequisites: ; Corequisite: EMS 240)*

**EMS 270 NREMT REVIEW****4.0 Credits**

This course provides the opportunity to practice and demonstrate proficiency in all of the required National Registry of Emergency Medical Technician (NREMT) skill stations. *(Prerequisites: ; Corequisite: EMS 271 and EMS 272)*

**EMS 271 ADVANCED EMERGENCY OPERATIONS****4.0 Credits**

This course introduces the concepts of EMS procedures including vehicle operations, hazardous materials response, and interaction with larger teams of emergency responders. *(Prerequisites: ; Corequisite: EMS 270 and EMS 272)*

**EMS 272 PARAMEDIC CAPSTONE****4.0 Credits**

This course provides the opportunity for the student to function as a team leader in a 911 response agency by managing and accounting for all aspects of the emergency scene and patient care. *(Prerequisites: ; Corequisite: EMS 270 and EMS 271)*

**ENG 010****1.0 Credit**

This course is a 1-credit hour co-requisite for students taking ENG 101. The class meets once a week in a small-group workshop with an experienced teacher. Students work with other students on assignments from their ENG 101 courses and reflect on writing and learning processes. The course is graded Pass/Fail (S or U). *(Prerequisite: Appropriate placement test scores; Corequisite: ENG 101)*

**ENG 011****1.0 Credits**

This course is a 1-credit hour co-requisite for students taking ENG 160. The class meets once a week in a small-group workshop with an experienced teacher. Students work with other students on assignments from their ENG 160 courses and reflect on writing and learning processes. The course is graded Pass/Fail (S or U). *(Prerequisite: Appropriate placement test scores; Corequisite: ENG 160))*

**ENG 100 INTRODUCTION TO COMPOSITION****3.0 Credits**

This course is a study of basic writing and different modes of composition and may include a review of usage. English 100 will develop basic composition skills by requiring frequent writing of short (three- to five-paragraph) essays. Those grammar and usage errors that occur frequently and disrupt writing will also be stressed. This course does not meet the requirements for an associate degree, but may meet requirements for a diploma or certificate. *(Prerequisites: Appropriate placement test scores)*

**ENG 101 ENGLISH COMPOSITION I****3.0 Credits**

This is a (college-transfer) course in which the following topics are presented: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are also presented. *(Prerequisites: ENG 100, RDG 100 or equivalent placement test scores)*

**ENG 102 ENGLISH COMPOSITION II****3.0 Credits**

This is a (college-transfer) course in which the following topics are presented: development of writing skills through logical organization, effective style, literary analysis and research. An introduction to literary genre is also included. *(Prerequisite: ENG 101)*

- ENG 105 EDITING ACADEMIC WRITING** **1.0 Credit**  
This course provides students with instruction and practice in editing their own writing for academic purposes. The course focuses on errors that interfere with communication or that cause readers to question the writer's academic competence.
- ENG 160 TECHNICAL COMMUNICATIONS** **3.0 Credits**  
This course is a study of various technical communications such as definitions, processes, instructions, descriptions, and technical reports. (*Prerequisites: ENG 100 and RDG 100 or equivalent placement test scores*)
- ENG 165 PROFESSIONAL COMMUNICATIONS** **3.0 Credits**  
This course develops practical written and oral professional communication skills. The course is oriented to current needs in industry and business, and assignments are drawn from students' majors. (*Prerequisite: ENG 101 or ENG 160*)
- ENG 175 PROOFREADING AND EDITING** **3.0 Credits**  
This course presents intensive application of advanced proofreading and editing skills, including usage and punctuation. (*Prerequisite: ENG 102 or ENG 165*)
- ENG 203 AMERICAN LITERATURE SURVEY** **3.0 Credits**  
This course is a survey of American literature: major authors, genres and periods. The course emphasizes historical, descriptive and analytical modes of study. This is a college-transfer course. (*Prerequisite: ENG 102*)
- ENG 205 ENGLISH LITERATURE I** **3.0 Credits**  
This is a (college-transfer) course in which the following topics are presented: the study of English literature from the old English period to the romantic period with emphasis on major writers and periods. (*Prerequisite: ENG 102*)
- ENG 206 ENGLISH LITERATURE II** **3.0 Credits**  
This is a (college-transfer) course in which the following topics are presented: the study of English literature from the romantic period to the present with emphasis on major writers and periods. (*Prerequisite: ENG 102*)
- ENG 207 LITERATURE FOR CHILDREN** **3.0 Credits**  
This course provides an introduction to children's literature in America through an examination of picture books and novels that depict Americans of various backgrounds and experiences. It focuses on defining quality in children's book writing and illustration, and assessing concerns in the field. This is a college-transfer course. (*Prerequisite: ENG 102*)
- ENG 208 WORLD LITERATURE I** **3.0 Credits**  
This course is a study of masterpieces of world literature in translation from the ancient world to the sixteenth century. Works studied are selected from various cultures throughout the world. This is a college-transfer course. (*Prerequisite: ENG 102*)
- ENG 209 WORLD LITERATURE II** **3.0 Credits**  
This course is a study of masterpieces of world literature in translation from the seventeenth century to the present. Works studied are selected from various cultures throughout the world. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 210 ASIAN LITERATURE****3.0 Credits**

This course is a survey of the major works, genres and writers of several Asian countries including China and Japan, emphasizing their relationships with the histories and cultures of the region. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 211 AFRICAN LITERATURE****3.0 Credits**

This course is a survey of the major works, genres and writers of Africa. The relationships between the literature, the culture, and the history of Africa will be emphasized. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 212 LATIN AMERICAN LITERATURE****3.0 Credits**

This course is a survey of the major works, genres, and writers of Latin America. The relationships among the literature, culture, and history of Latin America will be emphasized. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 214 FICTION****3.0 Credits**

This course is a study of fiction from several cultures. Emphasis is on the nature of the genre and appropriate reading strategies. It concentrates particularly on analytic reading and writing skills. This is a college-transfer course. (*Corequisite/Prerequisite: ENG 102*)

**ENG 218 DRAMA****3.0 Credits**

This course is a study of drama from several cultures. Emphasis is on the nature of the genre and appropriate reading strategies. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 222 POETRY****3.0 Credits**

This course is a study of poetry from several cultures. Emphasis is on the nature of the genre and appropriate reading strategies. It concentrates on analytical reading and writing skills to increase understanding and appreciation of poetry. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 228 STUDIES IN FILM GENRE****3.0 Credits**

This course is a critical examination of significant films. Films representing a variety of genres (western, film noir, screwball comedy, etc.) and countries will be viewed and analyzed. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 230 WOMEN IN LITERATURE****3.0 Credits**

This course is a critical study of women's writings examined from historical, social, and psychological points of view. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 234 SURVEY IN MINORITY LITERATURE****3.0 Credits**

This course is a critical study of minority writings, examined from historical, social, and psychological points of view. This is a college-transfer course. (*Prerequisite: ENG 102*)

**ENG 236 AFRICAN AMERICAN LITERATURE****3.0 Credits**

This course is a critical study of African American literature examined from historical, social, and psychological perspectives. This is a college-transfer course. (*Prerequisite: ENG 102*)

- ENG 238 CREATIVE WRITING** **3.0 Credits**  
This course presents an introduction to creative writing in various genres. (*Corequisite/Prerequisite: ENG 102*)
- ENG 260 ADVANCED TECHNICAL COMMUNICATIONS** **3.0 Credits**  
This course develops skills in research techniques and increases proficiency in technical communications. (*Prerequisite: ENG 102 or ENG 165*)
- ENG 263 WRITING FOR SOCIAL MEDIA** **3.0 Credits**  
This course emphasizes the rhetorical strategies needed to employ social media for professional purposes. (*Prerequisites: ENG 102 or ENG 165 or BUS 130*)
- ENG 299 SPECIAL TOPICS IN ENGLISH** **3.0 Credits**  
This course focuses on a specific purpose for, issue in, or type of English such as South Carolina literature, writing for the Web, or a history of literature censorship in the US. (*Prerequisite: ENG 102*)
- EVT 102 BASIC WATER TREATMENT** **3.0 Credits**  
This course will enable the student to have a general concept of groundwater and surface water treatment techniques as well as the physical and chemical unit processes applied to drinking water treatment and the daily routine tasks associated with the operation of potable water supply systems. (*Prerequisite: CHM 110 or CHM 106*)
- EVT 111 INTRODUCTION TO WATER AND WASTEWATER TREATMENT LABORATORY** **1.0 Credit**  
This course introduces the chemical and biological analytical techniques used to measure water and wastewater quality. (*Prerequisite: CHM 110 or CHM 106*)
- EVT 271 SPECIAL TOPICS IN ENVIRONMENTAL ENGINEERING TECHNOLOGY** **3.0 Credits**  
This course covers specific topics related to environmental engineering technology. (*Prerequisite: CHM 111 or CHM 112*)
- EVT 254 INDUSTRIAL SAFETY AND EMERGENCY RESPONSE** **3.0 Credits**  
This course covers state and federal regulations related to worker safety, industrial hygiene, and response to emergency situations. Emphasis is placed on response to releases of hazardous materials. (*Prerequisite: CHM 110 or CHM 106*)
- FRE 101 ELEMENTARY FRENCH I** **4.0 Credits**  
This course consists of a study of the four basic language skills: listening, speaking, reading and writing, including an introduction to French culture. (*Prerequisite: ENG 100 and have never studied French or placed by examination into FRE 101*)
- FRE 102 ELEMENTARY FRENCH II** **4.0 Credits**  
This course continues the development of basic language skills and includes a study of French culture. It stresses the grammar and vocabulary necessary for fundamental communications skills. (*Prerequisite: FRE 101 with a "C" or better or have placed by examination into FRE 102*)

- FRE 122 BASIC PROFICIENCY IN FRENCH** **3.0 Credits**  
This course covers the practice and further development of essential reading, writing, listening, and speaking skills. *(Prerequisite: FRE 102 with a "C" or better or have placed by examination into FRE 122)*
- GEO 101 INTRODUCTION TO GEOGRAPHY** **3.0 Credits**  
This course is an introduction to the principles and methods of geographic inquiry. The course curriculum will focus on investigating and interpreting cultural landscapes in the local area. *(Prerequisites: RDG 100, ENG 032)*
- GEO 102 WORLD GEOGRAPHY** **3.0 Credits**  
This course includes a geographic analysis of the regions of the world, i.e., North and South America, Europe, Australia, Asia and Africa. Diversity of each region is emphasized by examining its physical environment, natural resources, social, cultural, economic and political systems. *(Prerequisites: RDG 100, ENG 032)*
- GEO 205 PHYSICAL GEOGRAPHY** **4.0 Credits**  
This course introduces students to the basic principles and methods of physical geography and applies them to the study of Earth's atmosphere, hydrosphere, lithosphere, and biosphere. This exploration of Earth's systems will draw special attention to the geographic distribution and processes behind our planet's geomorphology, natural resources, and human-environment interactions. *(Prerequisites: RDG 100, ENG 100)*
- GER 101 ELEMENTARY GERMAN I** **4.0 Credits**  
This course is a study of the four basic language skills: listening, speaking, reading, and writing. The course includes an introduction to German culture. *(Prerequisite: ENG 100 and have never studied German or placed by examination into GER 101)*
- GER 102 ELEMENTARY GERMAN II** **4.0 Credits**  
This course continues the development of the four basic language skills and the study of German culture. *(Prerequisite: GER 101 with a "C" or better or have placed by examination into GER 102)*
- GER 122 BASIC PROFICIENCY IN GERMAN** **3.0 Credits**  
This course provides practice and an opportunity for enhanced proficiency in the German language to include essential listening, speaking, reading, and writing skills. Emphasis is also placed on Germanic culture. *(Prerequisite: GER 102 with a "C" or better or have placed by examination into GER 122)*
- HIS 101 WESTERN CIVILIZATION TO 1689** **3.0 Credits**  
This course is a survey of western civilization from ancient times to 1689, including the major political, social, economic, and intellectual factors shaping western cultural tradition. *(Prerequisites: RDG 100, ENG 100)*
- HIS 102 WESTERN CIVILIZATION POST 1689** **3.0 Credits**  
This course is a survey of western civilization from 1689 to the present, including the major political, social, economic, and intellectual factors which shape the modern western world. *(Prerequisites: RDG 100, ENG 100)*

**HIS 104 WORLD HISTORY I 3.0 Credits**

This course covers world history from prehistory to circa 1500 A.D., focusing on economic, social, political, and cultural aspects of people before the onset of western dominance and identifying major patterns and trends which characterized the world in each era. (*Prerequisites: RDG 100, ENG 100*)

**HIS 105 WORLD HISTORY II 3.0 Credits**

This course covers world history from circa 1500 A.D. to the present, focusing on the development of a system of interrelationships based on western expansion and on the economic, social, political, and cultural aspects of each era. (*Prerequisites: RDG 100, ENG 100*)

**HIS 106 INTRODUCTION TO AFRICAN HISTORY 3.0 Credits**

This course is an examination of several traditional sub-Saharan African societies and their political and economic transformation in the modern, colonial, and post-independence periods. (*Prerequisites: RDG 100, ENG 100*)

**HIS 107 INTRODUCTION TO THE MIDDLE EAST 3.0 Credits**

This course analyzes the evolution of diverse social, political, environmental, and cultural patterns in the Middle East. Emphasis is placed on the development of historical, geographical, and religious constructs and their effect on rural, urban, and global relationships across the historical timeline. (*Prerequisites: RDG 100, ENG 100*)

**HIS 108 INTRODUCTION TO EAST ASIAN CIVILIZATION 3.0 Credits**

This course is an analysis of the evolution of social, political, and cultural patterns in East Asia, emphasizing the development of philosophical, religious, and political institutions and their relationship to literary and artistic forms in China and Japan. (*Prerequisites: RDG 100, ENG 100*)

**HIS 109 INTRODUCTION TO LATIN AMERICAN CIVILIZATION 3.0 Credits**

This course is an analysis of the political, cultural, and economic forces which have shaped the development of institutions and ideas in Spanish and Portuguese America. (*Prerequisites: RDG 100, ENG 100*)

**HIS 113 NATIVE AMERICAN HISTORY 3.0 Credits**

This course is the study of several Native American societies and their cultural, political, and economics transformation in the pre-Columbian, colonial, and modern periods. (*Prerequisites: RDG 100, ENG 100*)

**HIS 130 AFRICAN-AMERICAN HISTORY TO 1877 3.0 Credits**

This survey course describes the efforts of Afro-Americans to define themselves through their social, economic and political contributions to American history. The history, impact and significance of the institution of slavery will be included. The chronological scope of the course ranges from the African origins of Afro-Americans to the frustrations associated with the failure of Reconstruction. (*Prerequisites: RDG 100, ENG 100*)

**HIS 131 AFRICAN-AMERICAN HISTORY 1877 TO PRESENT 3.0 Credits**

This course describes the efforts of African Americans to define themselves through their social, economic, and political contributions to American history from the time of reconstruction to the present. *(Prerequisites: RDG 100, ENG 100)*

**HIS 201 AMERICAN HISTORY: DISCOVERY TO 1877 3.0 Credits**

This course is a survey of U.S. history from discovery to 1877. This course includes political, social, economic, and intellectual developments during this period. *(Prerequisites: RDG 100, ENG 100)*

**HIS 202 AMERICAN HISTORY: 1877 TO PRESENT 3.0 Credits**

This course is a survey of U.S. history from 1877 to the present. This course includes political, social, economic, and intellectual developments during this period. *(Prerequisites: RDG 100, ENG 100)*

**HIS 213 HISTORY STUDY IN THE UNITED STATES 3.0 Credits**

This course includes travel to selected cities/areas around the United States and provides a field study of historical and contemporary history of the city/area to which the class is traveling. *(Prerequisites: RDG 100, ENG 100)*

**HIS 214 HISTORY STUDY ABROAD 3.0 Credits**

The course includes travel to selected regions outside the United States and provides a field study of historical and contemporary history. *(Prerequisites: RDG 100, ENG 100)*

**HIS 220 AMERICAN STUDIES I 3.0 Credits**

This course is an interdisciplinary study of selected topics and eras in U.S. history. *(Prerequisites: RDG 100, ENG 100. Recommended: HIS 201 or HIS 202)*

**HIS 221 AMERICAN STUDIES II 3.0 Credits**

This course is an interdisciplinary study of selected topics and eras in U.S. history. *(Prerequisites: RDG 100, ENG 100. Recommended: HIS 201 or HIS 202)*

**HIS 230 THE AMERICAN CIVIL WAR 3.0 Credits**

This course explores the history of the Civil War from the election of 1860 through the end of reconstruction in 1877. *(Prerequisites: RDG 100, ENG 100. Recommended: HIS 201 or HIS 202, ENG 101)*

**HIS 235 AMERICAN MILITARY HISTORY 3.0 Credits**

This course explores the development of the American military from the 1600s through the Vietnam War. Study focuses on the military's actions during conflicts with other nations, its relation to society and its role in the evolution of the American nation. *(Prerequisites: RDG 100, ENG 100. Recommended: HIS 201 or HIS 202, ENG 101)*

**HSM 101 INTRODUCTION TO HOMELAND SECURITY 3.0 Credits**

This course is an overview of homeland security as an interdisciplinary system. The components of the homeland security system and their relationships will be examined, including law enforcement, intelligence, transportation and border security, emergency management and public health preparedness. *(Prerequisites: ENG 100, RDG 100)*

**HSM 103 INTRODUCTION TO EMERGENCY MANAGEMENT 3.0 Credits**

This course is a study of techniques used to establish and maintain an emergency management system in the public sector. The four functions of emergency management are introduced (i.e., mitigation, preparedness, response, and recovery), and students will explore the emergency manager's role in each. *(Prerequisites: ENG 100, RDG 100)*

**HSM 104 TERRORISM AND HOMELAND SECURITY 3.0 Credits**

This course provides an overview of the problem of terrorism and homeland security efforts by drawing on several disciplines. An emphasis is placed on problems and countermeasures within an "all-hazards" approach to protecting people and assets. *(Prerequisites: ENG 100, RDG 100)*

**HSM 201 CRITICAL INCIDENT MANAGEMENT 3.0 Credits**

This course explores the management and leadership principles necessary for the successful resolution of critical incidents. The National Incident Management System and the Incident Command System will be examined to provide an all hazard, interdisciplinary approach to critical incident management. *(Prerequisites: ENG 100, RDG 100)*

**HSM 203 INTELLIGENCE ANALYSIS AND SECURITY MANAGEMENT 3.0 Credits**

This course examines intelligence analysis and its relationship to the security management of terrorist attacks, man-made disasters and natural disasters. Topics will also include the related vulnerabilities of our national defense and private sectors. *(Prerequisites: ENG 100, RDG 100)*

**HUS 101 INTRODUCTION TO HUMAN SERVICES 3.0 Credits**

This course covers an overview of the field of human services. Role responsibilities, problems, boundaries, and strategies of human service workers are included. This course also includes an overview of agencies in the service area, curriculum requirements and career opportunities. A 20-hour practicum in a social service organization is required. *(Prerequisite: HUS 102)*

**HUS 102 PERSONAL AND PROFESSIONAL DEVELOPMENT 3.0 Credits  
IN THE HELPING PROFESSIONS**

This course provides students with the opportunity to gain a greater awareness of "self" through values clarification activities, reflective writing, etc., and to understand how attitudes, values and beliefs impact both their personal and professional lives. *(Prerequisite: ENG 032)*

**HUS 112 SERVICES FOR THE ELDERLY 2.0 Credits**

This course is a study of services available for older adults (55 and over), including health, social, recreational, financial, and educational services. *(Prerequisites: RDG 100, ENG 032)*

**HUS 134 ACTIVITY THERAPY 3.0 Credits**

The course is a study of activity programs for human services settings. Actual activity projects for various settings are developed by the students. *(Prerequisites: RDG 100, ENG 032)*

**HUS 201 FAMILY SYSTEM DYNAMICS****3.0 Credits**

This course examines the role of family structure, interaction and other dynamics in the development, maintenance and treatment of family dysfunctions. *(Prerequisites: ENG 100, PSY 201, SOC 101)*

**HUS 204 INTRODUCTION TO SOCIAL WORK****3.0 Credits**

This course includes a general introduction to social work, including history, philosophy, organization, methods, and settings, with emphasis on rehabilitation and other community services. *(Prerequisites: ENG 100, HUS 101)*

**HUS 206 DEATH AND DYING****3.0 Credits**

This course is a study of the issues of death and dying. Stages of dying, dealing with dying, dealing with sudden death and grief are covered in the course. An examination of the sociocultural issues surrounding death and the process of dying in society are made. *(Prerequisites: RDG 100, ENG 100)*

**HUS 207 COMMUNITY ORGANIZING****3.0 Credits**

This course is a study of the process and skills needed to organize communities to address identified problems or issues that affect them. The political and social context in which organizing takes place will be examined. *(Prerequisite: HUS 101 or HUS 204)*

**HUS 208 ALCOHOL AND DRUG ABUSE****3.0 Credits**

This course is a study of the etiology of alcohol and drug abuse, various types of addictive substances, physical, mental and social implications, programs in rehabilitation, and preventive education. *(Prerequisites: RDG 100, ENG 100)*

**HUS 209 CASE MANAGEMENT****3.0 Credits**

This course covers accepted methods and strategies for effectively assessing client needs, accessing necessary provider agencies, and monitoring and properly documenting service delivery and client welfare. *(Prerequisites: ENG 101)*

**HUS 217 ADDICTIONS COUNSELING****3.0 Credits**

The course provides specific skills for the diagnosis and treatment of substance abuse and additions. Topics to be discussed include causes and diagnoses of additions, and treatment modalities. *(Prerequisites: RDG 100, ENG 100)*

**HUS 221 PROFESSIONAL ETHICS IN HUMAN SERVICES PRACTICE****3.0 Credits**

The course is an in-depth analysis of human services ethics, application of NOHSE codes of ethics, and concepts and dilemmas specific to helping relationships. *(Prerequisite: HUS 102)*

**HUS 222 LEADERSHIP DEVELOPMENT IN HUMAN SERVICES 3.0 Credits**

The course is an overview of human services leadership and professional development principles, historical and contemporary issues common to human services management and administration, and comparative analyses of the personal and professional development philosophies of leaders in the human services field. *(Prerequisites: RDG 100, ENG 100)*

- HUS 230 INTERVIEWING TECHNIQUES** **3.0 Credits**  
This course covers the development of skills necessary for interviews in various organizational settings. Students in Human Services will use these skills and knowledge later on their supervised field placements. *(Prerequisites: RDG 100, ENG 100)*
- HUS 231 COUNSELING TECHNIQUES** **3.0 Credits**  
This course is a study of a variety of counseling techniques necessary to assist qualified therapists in a variety of therapeutic settings. Students will demonstrate procedures and knowledge of basic counseling theories and techniques related to human services. *(Prerequisites: RDG 100, ENG 100)*
- HUS 235 GROUP DYNAMICS** **3.0 Credits**  
This course is an examination of the theory and practice of group dynamics. Emphasis is on the application of the value and use of the group process in specialized settings related to human services. *(Prerequisite: ENG 101)*
- HUS 237 CRISIS INTERVENTION** **3.0 Credits**  
This course is a study of the effects of crisis on people, the methods of intervention and other use of multiple resources to reestablish individual function. Students are required to demonstrate mock crisis activities. *(Prerequisites: ENG 101, HUS 102, HUS 230, PSY 201)*
- HUS 250 SUPERVISED FIELD PLACEMENT I** **4.0 Credits**  
This course includes work experience assignments in selected human service agencies. *(Prerequisites: HUS 209, HUS 235, HUS 237, with a minimum grade of "C" or better; 30 credit hours completed)*
- HUS 251 SUPERVISED FIELD PLACEMENT II** **4.0 Credits**  
This course includes work assignments in selected human service agencies. *(Prerequisite: HUS 250 with a grade of "C" or better)*
- HUS 260 HUMAN SERVICES SPECIAL TOPICS** **3.0 Credits**  
This course is a study of special topics of interest to particular populations and locations. *(Prerequisites: RDG 100, ENG 100)*
- IDS 112 EMPLOYABILITY SKILLS FOR CAREERS** **1.0 Credits**  
This course develops employability skills including resume writing, interviewing, presentation delivery and soft skills. *(Prerequisite: COL 101)*
- IMT 108 INTRODUCTION TO INDUSTRIAL TECHNOLOGY** **2.0 Credits**  
This course will provide information needed to help in choosing a career in selected industrial areas. The student will be subjected to some of the tasks and skills that would be expected of a person working in the field. *(Prerequisites: RDG 100, MAT 152, ENG 032)*
- IMT 110 INDUSTRIAL INSTRUMENTATION** **3.0 Credits**  
This course covers fundamentals of pressure, flow, level, and temperature instrumentation. *(Prerequisite: MAT 170)*

- IMT 112      HAND TOOL OPERATIONS      3.0 Credits**  
 This course covers the use of hand tools and their applications in industrial and service areas. *(Prerequisites: RDG 100, MAT 152, ENG 032)*
- IMT 131      HYDRAULICS AND PNEUMATICS      4.0 Credits**  
 This course covers the basic technology and principles of hydraulics and pneumatics.
- IMT 151      PIPING SYSTEMS      3.0 Credits**  
 This course covers plumbing and piping systems used in industrial commercial and/or residential construction. Emphasis is placed on the reading and sketching of piping schematics as well as the fabrication and design of piping systems. *(Prerequisites: RDG 100, MAT 100 or MAT 152, ENG 032)*
- IMT 160      PREVENTIVE MAINTENANCE      3.0 Credits**  
 This course covers preventive maintenance techniques. *(Prerequisites: MTT 106 and MTT 102 or MTT 151)*
- IMT 214      INDUSTRIAL WIRING      3.0 Credits**  
 This course introduces the principles of wiring related to commercial and industrial, alternating current, and motors including theory and application. (Note: Course is aligned with NCCER modules 32201, 32202, and 32203). *(Prerequisites: RDG 100, MAT 152, ENG 032)*
- IST 100      ACADEMIC COMPUTING SKILLS      1.0 Credit**  
 This course is an introduction to the computing skills needed for academic success, including computer management, file management, printing, basic word processing, email, and using a Web browser for research and for accessing Web-based systems.
- IST 115      HUMAN ASPECT IN CYBERSECURITY      3.0 Credits**  
 This course studies the human aspect of cybersecurity and the motivation behind cybercrimes. Topics Include ethics, laws, policies, and psychology as It applies to cybersecurity. *(Prerequisite: RDG 100)*
- IST 150      PROJECT MANAGEMENT ESSENTIALS FOR  
IT PROFESSIONALS      3.0 Credits**  
 This course is the study of integrated project management for computer technology professionals with emphasis on the methods and software used by IT professionals, including task lists, Gantt charts, discussion of critical path statistical resource management, scheduling, budgeting , and economic factors. *(Prerequisite: RDG 100)*
- IST 164      IMPLEMENTING NETWORK INFRASTRUCTURE  
SERVICES      3.0 Credits**  
 This course is a study of the fundamentals of installing, configuring and utilizing windows networking services while exploring techniques used to design, create and implement secure communications across the networks, which may consist of multiple vendors. Emphasis is also provided on support of remote users and central management concepts. *(Prerequisite: RDG 100)*

**IST 165      IMPLEMENTING AND ADMINISTERING      3.0 Credits**  
**ACTIVE DIRECTORY SERVICES**

This course is a study of directory services covering the planning, design, installation, configuration and administration of a network directory structure. *(Prerequisite: IST 164)*

**IST 188      HARDWARE BASICS AND OPERATING SYSTEMS      5.0 Credits**

This course is the study of installation, upgrading and configuration of personal computers from the basics of motherboards and memory to an introduction to networking, along with installation, configuration and upgrading operating systems. *(Prerequisite: RDG 100)*

**IST 193      LINUX SECURITY ADMINISTRATION      3.0 Credits**

This course will provide student with the skills necessary to implement and administer basic LINUX security policies, including authentication, securing network applications, system monitoring, encryption, and others. *(Prerequisite: IST 200)*

**IST 200      CISCO LAN CONCEPTS      3.0 Credits**

This course is a study of small local area networks - home and small office/home offices (SOHO) networks. Topics include an introduction to networking, basic cabling for SOHO, LAN addressing and network services, basic security and wireless, planning and building a home network. *(Prerequisites: RDG 100, equivalent placement test scores)*

**IST 201      CISCO INTERNETWORKING CONCEPTS      3.0 Credits**

This course is a study of current and emerging computer networking technology. Topics covered include safety, networking, network terminology and protocols, network standards, LANs, WANs, OSI models, cabling, cabling tools, Cisco routers, router programming, star topology, IP addressing, and network standards. *(Prerequisite: IST 200)*

**IST 202      CISCO ROUTER CONFIGURATION      3.0 Credits**

This course is a study of LANs, WANs, OSI models, Ethernet, token ring, fiber distributed data interface TCP/IP addressing protocol, dynamic routing, routing, and the network administrator's role and function. *(Prerequisite: IST 201)*

**IST 203      ADVANCED CISCO ROUTER CONFIGURATION      3.0 Credits**

This course is a study of configuring Cisco routers. *(Prerequisite: IST 202)*

**IST 221      ADVANCED DATA COMMUNICATIONS      3.0 Credits**

This course is a study of the structure of the telecommunications industry. Topics include the components, services and features of the most popular voice communications system. *(Prerequisite: IST 202)*

**IST 225      INTERNET COMMUNICATIONS      3.0 Credits**

This course covers introductory topics and techniques associated with the internet and internet communications. Techniques on how to use and access various types of information as well as how to find resources and navigate the internet are included. *(Prerequisites: MAT 152, RDG 100)*

**IST 226 INTERNET PROGRAMMING 3.0 Credits**

This course covers designing internet pages and applications for personal/business use, writing the required program code in languages such as HTML, Java, and VRML, testing and debugging programs, uploading and maintaining internet pages and applications. *(Prerequisites: CPT 115 or CPT 236, IST 225)*

**IST 227 INTERNET OPERATIONS AND MANAGEMENT 3.0 Credits**

This course covers the duties/responsibilities of an internet webmaster, appropriate hardware, software and telecommunications technology, designing, implementing and maintaining a web site, and utilizing security mechanisms. Also covered is installing, configuring and testing TCP/IP. Topics include Subnet addressing; implementing IP routing; dynamic host configuration protocol; IP address resolution; NetBIOS name resolution; Windows Internet Name Service; connectivity; in heterogeneous environments; implementing Microsoft SNMP service; performance optimization and troubleshooting. *(Prerequisite: IST 202)*

**IST 228 INTRANET OPERATIONS AND MANAGEMENT 3.0 Credits**

This course covers the duties and responsibilities of an intranet webmaster, selecting appropriate hardware, software and telecommunications technology, designing, implementing and maintaining an intranet site, describing issues relating to interconnection of internet to an intranet, and utilizing security mechanisms. Also covered is the integrated web server included with Windows NT Server. Topics include sharing documents and information across a company intranet or the Internet, deploying scalable and reliable web-based applications, combining HTML, scripts or reusable ActiveX server components to create dynamic and powerful web-based business solutions. *(Prerequisite: IST 227)*

**IST 235 HANDHELD COMPUTER PROGRAMMING 3.0 Credits**

This course is a survey of the techniques of Rapid Application Development for handheld devices. Topics include setup of development environment, creation and deployment of programs, and design strategies to overcome memory and interface limitations. *(Prerequisite: CPT 237)*

**IST 236 MOBILE AND WIRELESS APPLIANCES 3.0 Credits**

This course is a survey of the protocols and interface standards for mobile and wireless appliances accessing the internet. An introduction to development and deployment of applications is included in this course. *(Prerequisite: IST 235)*

**IST 238 ADVANCED TOOLS FOR WEBSITE DESIGN 3.0 Credits**

This course is a study of an advanced (4th generation) web authoring tool (such as Dreamweaver) to develop increased efficiency and sophistication in website design and web project management. *(Prerequisites: CPT 290, IST 225)*

**IST 250 NETWORK MANAGEMENT 3.0 Credits**

This course is a study of planning, organizing and controlling network functions for the potential networking manager. Emphasis is placed on current situations and techniques. *(Prerequisite: IST 202)*

- IST 257 LAN NETWORK SERVER TECHNOLOGIES 3.0 Credits**  
This course is a study of network operating system technologies including network operating system architecture, the installation, configuration, monitoring and troubleshooting of network resources, and network administration functions such as user/group maintenance, network security, print services, remote access, fault tolerance, backup and recovery. *(Prerequisite: RDG 100)*
- IST 260 NETWORK DESIGN 3.0 Credits**  
This course is a study of the processes and techniques required to identify the most attractive design solution of a telecommunications network—combining creativity, rigorous discipline, analysis, and synthesis—and while emphasizing the solution in terms of cost and performance. *(Prerequisite: IST 202)*
- IST 263 DESIGNING WINDOWS NETWORK SECURITY 3.0 Credits**  
This course is an advanced study of security features of networks including authentication protocol, public key infrastructure, IPsec, and certificate servers. *(Prerequisite: IST 291)*
- IST 266 INTERNET AND FIREWALL SECURITY 3.0 Credits**  
This course is an introduction to firewalls and other network security components that can work together to create an in-depth defensive perimeter around a Local Area Network (LAN). *(Prerequisite: IST 200)*
- IST 267 NETWORK VULNERABILITY ASSESSMENT 3.0 Credits**  
This course provides students with the knowledge and skills necessary to test network security using network vulnerability assessment tools and methods. Students will also learn how to improve network security based on the assessment results. *(Prerequisite: IST 291)*
- IST 270 CLIENT/SERVER SYSTEMS 3.0 Credits**  
This course emphasizes the use of case tools coupled with client tools to allow RAD and prototyping of client applications. Networking and server concepts will be explored. Case studies of existing client/server systems will be used to examine the various phases of client/server applications. *(Prerequisites: CPT 236, CPT 242, CPT 262)*
- IST 272 RELATIONAL DATABASE 3.0 Credits**  
This course provides a comprehensive foundation in both SQL and relational database design and implementation. Dynamic and embedded SQL programming techniques are emphasized. *(Prerequisite: CPT 242 or permission of department chair)*
- IST 274 DATABASE ADMINISTRATION 3.0 Credits**  
This course is a study of the duties and responsibilities of a database administrator. The course covers setting up, maintaining, and troubleshooting a distributed, multi-user database. *(Prerequisite: IST 272)*
- IST 285 CYBERSECURITY CAPSTONE 3.0 Credits**  
This course integrates the knowledge and skills gained through previous coursework and experience to develop and implement risk management, vulnerability assessment, threat analysis, and incident response plans. *(Prerequisite: IST 267)*

- IST 286 TECHNICAL SUPPORT INTERNSHIP I 3.0 Credits**  
This course is an entry level technical support/help desk internship. Students intern at the college's help desk and provide support to faculty and staff. Students will participate in weekly evaluation sessions of calls and solutions. *(Prerequisite: CPT 268)*
- IST 287 TECHNICAL SUPPORT INTERNSHIP II 3.0 Credits**  
This course is an intermediate level technical support/help desk internship. Students intern at the college's help desk and provide support to faculty and staff. The student prepares a portfolio for submission. *(Prerequisite: IST 286)*
- IST 290 SPECIAL TOPICS IN INFORMATION SCIENCES 3.0 Credits**  
This course covers special topics in information sciences technologies. *(Prerequisite: permission of department chair)*
- IST 291 FUNDAMENTALS OF NETWORK SECURITY I 3.0 Credits**  
This course is a study of intro levels of security processes based on a security policy, emphasizing hands-on skills in the areas of secure perimeter, security connectivity, security management, identity services, and intrusion detection. The course prepares students to manage network security. *(Prerequisites: IST 202, IST 203, IST 266, RDG 100)*
- IST 292 FUNDAMENTALS OF NETWORK SECURITY II 3.0 Credits**  
This course is a study of advanced security processes based on a security policy, emphasizing hands-on skills in the areas of secure perimeter, security connectivity, security management, identity services, and intrusion detection. The course prepares students to install/configure secure firewalls. *(Prerequisite: IST 291)*
- IST 293 IT AND DATA ASSURANCE I 3.0 Credits**  
This course introduces the basics of network security. Topics covered will include network vulnerabilities and threats, security planning, security technology, network security organization, as well as legal and ethical issues related to network security. *(Prerequisite: IST 291, RDG 100)*
- IST 295 FUNDAMENTALS OF VOICE OVER IP 3.0 Credits**  
This course is an introduction to features of Voice over IP protocols, including VOIP hardware selection and network design considerations. Concepts include analog and digital voice encoding signaling and Quality of Service (QOS) and troubleshooting and configuration of VOIP networks. *(Prerequisites: IST 202, IST 203)*
- ITP 106 LINGUISTICS OF AMERICAN SIGN LANGUAGE 3.0 Credits**  
This course consists of a study of the structure, grammar, and syntax of American Sign Language. *(Prerequisite: ASL 102)*
- ITP 201 DEAF HISTORY AND CULTURE 3.0 Credits**  
This course is a study of the history and culture of deaf people. The course explores language, education, community, and attitudinal changes toward deaf people as a minority. *(Prerequisites: ENG 100, RDG 100)*

**LEG 120 TORTS****3.0 Credits**

This course is a study of the various classifications and functions of tort law, including intentional and negligent torts, causation, proximate cause, and defenses. *(Prerequisite: LEG 135)*

**LEG 121 BUSINESS LAW I****3.0 Credits**

This course is a study of the basics of commercial law, with emphasis on the formation and enforcement of contracts and the rules particular to the Uniform Commercial Code (UCC) and sales of goods. *(Prerequisites: RDG 100, ENG 100)*

**LEG 122 BUSINESS LAW II****3.0 Credits**

This course is an in-depth study of the Uniform Commercial Code, with special emphasis on the essentials of Article 3, Commercial Paper, and Article 9, Secured Transactions. Business partnerships and corporations and their formation are studied. *(Prerequisite: LEG 121, LEG 135)*

**LEG 132 LEGAL BIBLIOGRAPHY****3.0 Credits**

This course is a study of the methods of legal research, proper citation of authority, use of legal treatises, texts, reporters and digests. This course introduces students to the techniques and procedures of legal writing and analysis. *(Prerequisite: LEG 135)*

**LEG 135 INTRODUCTION TO LAW AND ETHICS****3.0 Credits**

This course provides a general introduction to law, including courts, legal terminology, procedures, systems, and laws of society. Emphasis is on ethics and the role of the paralegal in the legal system. *(Prerequisites: RDG 100, ENG 100)*

**LEG 201 CIVIL LITIGATION I****3.0 Credits**

This course is a study of the principles of litigation and the rules of procedure for each court in the South Carolina system, including pleading, practice and discovery procedures. *(Prerequisite: LEG 120, LEG 135)*

**LEG 212 WORKERS' COMPENSATION****3.0 Credits**

This course is a study of the history of workers' compensation, case laws, statutes, and regulations, and procedures in handling claims. *(Prerequisite: LEG 120, LEG 135)*

**LEG 213 FAMILY LAW****3.0 Credits**

This course includes an examination of the laws of marriage, divorce, annulment, separation, adoption, custody, and the juvenile. *(Prerequisite: LEG 135)*

**LEG 214 PROPERTY LAW****3.0 Credits**

This course includes an overview of South Carolina property law, including the mechanics of various commercial and private property transactions and mortgage foreclosures. Students are introduced to techniques and procedures for examining titles to real property. *(Prerequisite: LEG 135)*

**LEG 215 BANKRUPTCY LAW****3.0 Credits**

Topics included in this course are an overview of the bankruptcy code, voluntary and involuntary petitions, bankruptcy "estate," stays, distribution and discharge, tax implications, local rules and discovery. *(Prerequisites: LEG 121, LEG 135)*

- LEG 220 INTELLECTUAL PROPERTY LAW** **3.0 Credits**  
This course is the study of the fundamental concepts involving copyright laws, trademarks, patents, and protecting intellectual property rights with emphasis placed on the typical functions performed by paralegals. *(Prerequisites: LEG 121, LEG 135)*
- LEG 230 LEGAL WRITING** **3.0 Credits**  
This course includes methods, techniques, and procedures for the research and preparation of legal memoranda, trial and appellate briefs, and trial notebooks. *(Prerequisite: LEG 132, LEG 135)*
- LEG 231 CRIMINAL LAW** **3.0 Credits**  
This course includes a study of the definition and classification of criminal offenses, criminal responsibility, and legal procedures in a criminal prosecution. *(Prerequisites: RDG 100, ENG 100)*
- LEG 232 LAW OFFICE MANAGEMENT** **3.0 Credits**  
This course is a study of the basic principles of office management, including administrative procedures, client relations, and office operating procedures. *(Prerequisite: LEG 135)*
- LEG 233 WILLS, TRUSTS AND PROBATE** **3.0 Credits**  
*This course* includes a detailed study of testacy and intestacy, preparation of wills and codicils, and fundamentals of trust and probate administration. Students probate a simple estate. *(Prerequisite: LEG 135)*
- LEG 234 TITLE EXAMINATION PROCEDURES I** **3.0 Credits**  
This course is a study of the common law and statutory requirements related to the transfer of real property with utilization of the appropriate indexes and documents in the appropriate city and county offices. *(Prerequisite: LEG 214, LEG 235)*
- LEG 242 LAW PRACTICE WORKSHOP** **3.0 Credits**  
This course includes the application of substantive knowledge in a practical situation as a paralegal. *(Prerequisite: LEG 135)*
- LEG 244 SPECIAL PROJECTS FOR PARALEGALS** **3.0 Credits**  
This course provides specialized paralegal training with an update on changes in the laws and procedures. *(Prerequisite: Permission of Program Director)*
- LEG 270 PARALEGAL CERTIFICATION PREPARATION** **3.0 Credits**  
This course provides a review and preparation for testing for a national paralegal certification exam. *(Prerequisite: Eligibility for NALA exam and instructor approval required.)*
- LNG 101 INTRODUCTION TO LANGUAGE** **3.0 Credits**  
This course is an introduction to the human capacity for language and to how it is acquired. Students will identify and learn about characteristics of language varieties, dialects, and styles and examine social and geographical factors that contribute to language variation and change. *(Prerequisite: ENG 101)*

**MAT 032 DEVELOPMENTAL MATHEMATICS****3.0 Credits**

Developmental Mathematics includes a review of arithmetic skills, and focuses on the study of measurement and geometry, basic algebra concepts, and data analysis. Application skills are emphasized. (*Prerequisite: Appropriate placement test scores*)

**MAT 101 BEGINNING ALGEBRA****3.0 Credits**

This course includes the study of rational numbers and their applications, operations with algebraic expressions, linear equations and applications, linear inequalities, graphs of linear equations, operations with exponents and polynomials, and factoring. (*Prerequisite: Equivalent placement test score*)

**MAT 102 INTERMEDIATE ALGEBRA****3.0 Credits**

This course includes the study of linear systems and applications; quadratic expressions, equations, functions and graphs; and rational and radical expressions and functions. (*Prerequisite: MAT 101 or MAT 152 or equivalent placement test score*)

**MAT 103 QUANTITATIVE REASONING****3.0 Credits**

This course is designed to develop quantitative reasoning and critical thinking skills. Topics include logic and computers, probability and statistics, financial mathematics, and additional applications selected to address areas of contemporary interest. (*Prerequisite: MAT 101 or MAT 152*)

**MAT 110 COLLEGE ALGEBRA****3.0 Credits**

This course includes the following topics: polynomial, rational, logarithmic, and exponential functions; inequalities; systems of equations and inequalities; matrices; determinants; and solutions of higher degree polynomials. (Graphing calculator required) (*Prerequisites: MAT 102, RDG 100 or equivalent placement test score*)

**MAT 111 COLLEGE TRIGONOMETRY****3.0 Credits**

This course includes the following topics: trigonometric functions; trigonometric identities; solution of right and oblique triangles; solution of trigonometric equations; polar coordinates; complex numbers, including DeMoivre's Theorem; vectors; conic sections; and parametric equations. (Graphing calculator required) (*Prerequisite: MAT 110*)

**MAT 120 PROBABILITY AND STATISTICS****3.0 Credits**

This course includes the following topics: introductory probability and statistics, including organization of data; sample space concepts; random variables; counting problems; binomial and normal distributions; central limit theorem; confidence intervals and hypothesis tests for large and small samples; type I and type II errors; linear regression; and correlation. (Graphing calculator required) (*Prerequisites: MAT 101 or MAT 152 with "C" or better, RDG 100 or equivalent placement test score*)

**MAT 122 FINITE COLLEGE MATHEMATICS****3.0 Credits**

This course includes the following topics: logic; sets; Venn Diagrams; counting problems; probability; matrices; systems of equations; linear programming, including the simplex method and applications; graphs; and networks. (Graphing calculator required) (*Prerequisites: MAT 102, RDG 100 or equivalent placement test score*)

- MAT 130 ELEMENTARY CALCULUS** **3.0 Credits**  
This course includes the following topics: differentiation and integration of polynomial, rational, logarithmic and exponential functions; and interpretation and application of these processes. (Graphing calculator required) (*Prerequisite: MAT 110*)
- MAT 140 ANALYTICAL GEOMETRY AND CALCULUS I** **4.0 Credits**  
This course includes the following topics: derivatives and integrals of polynomials; rational, logarithmic, exponential, trigonometric, and inverse trigonometric functions; curve sketching; maxima and minima of functions; related rates; work; and analytic geometry. (Graphing calculator required) (*Prerequisites: MAT 110, MAT 111*)
- MAT 141 ANALYTICAL GEOMETRY AND CALCULUS II** **4.0 Credits**  
This course includes the following topics: continuation of calculus of one variable, including analytic geometry, techniques of integration, volumes by integration, and other applications; infinite series, including Taylor series and improper integrals. (Graphing calculator required) (*Prerequisite: "C" or better in MAT 140*)
- MAT 152 ELEMENTARY ALGEBRA** **5.0 Credits**  
This course includes the following topics: operations with signed numbers and algebraic expression; solving linear equations; factoring; and an introduction to graphing. (*Prerequisite: RDG 032, MAT 032 or appropriate placement scores*)
- MAT 155 CONTEMPORARY MATHEMATICS** **3.0 Credits**  
This course includes techniques and applications of the following topics: properties of and operations with real numbers, elementary algebra, consumer mathematics, applied geometry, measurement, graph sketching and interpretations, and descriptive statistics. (*Prerequisite: MAT 032 or equivalent placement test score*)
- MAT 170 ALGEBRA, GEOMETRY, AND TRIGONOMETRY** **3.0 Credits**  
This course includes the following topics: elementary algebra, geometry, trigonometry, and applications. (*Prerequisite: MAT 032*)
- MAT 240 ANALYTICAL GEOMETRY AND CALCULUS III** **4.0 Credits**  
This course includes the following topics: multivariable calculus, including vectors; partial derivatives and their applications to maximum and minimum problems with and without constraints; line integrals; multiple integrals in rectangular and other coordinates; and Stokes' and Green's theorems. (Graphing calculator required) (*Prerequisite: "C" or better In MAT 141*)
- MAT 242 DIFFERENTIAL EQUATIONS** **4.0 Credits**  
This course includes the following topics: solution of linear and elementary non-linear differential equations by standard methods with sufficient linear algebra to solve systems; applications; series; Laplace transform; and numerical methods. (Graphing calculator required) (*Prerequisite: "C" or better in MAT 141*)
- MAT 250 ELEMENTARY MATHEMATICS** **3.0 Credits**  
Course provides students with an understanding of the meaning of numbers, fundamental operations of arithmetic, structure of the real number system & its subsystems, & elementary numbers theory. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive

four-year college or university. This course is recommended for students who plan to major in Early Childhood or Elementary Education. (Graphing calculator required)  
(Prerequisite: MAT 110)

### **MAT 251 ELEMENTARY MATHEMATICS II**

**3.0 Credits**

This course provides students with an understanding of informal geometry and basic concepts of measurement. Within the parameters of an approved articulation agreement, this course may transfer to an accredited Education program at a comprehensive four-year college or university. This course is recommended for students who plan to major in Early Childhood or Elementary Education. (Graphing calculator required)  
(Prerequisite: MAT 110)

### **MED 103 MEDICAL ASSISTING INTRODUCTION**

**3.0 Credits**

This course provides an introduction to the profession of medical assisting, including qualifications, duties, and the role of the medical assistant. It also covers law and ethics as they relate to the medical office, with emphasis on the medical assisting profession.  
(Prerequisites: RDG 100, ENG 100 or equivalent placement test score and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)

### **MED 104 MEDICAL ASSISTING ADMINISTRATIVE PROCEDURES**

**4.0 Credits**

This course provides a study of receptionist duties, patient record management, insurance claims processing, IDC-9-CM, CPT and HCPCS coding, letter writing, computer applications and the use of other business machines. (Prerequisites: RDG 100, ENG 100 or equivalent placement test score and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)

### **MED 109 MEDICAL BUSINESS RECORDS**

**3.0 Credits**

This course provides a study of record keeping procedures utilized in physicians' offices and other clinical facilities, insurance claims processing, ICD-10-CM, CPT and HCPCS coding. (Prerequisites: MED 103, MED 104 and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)

### **MED 112 MEDICAL ASSISTING PHARMACOLOGY**

**2.0 Credits**

This course provides a study of principles of pharmacology, drug therapy and the administration of medications. (Prerequisite: MAT 155 and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)

### **MED 113 BASIC MEDICAL LABORATORY TECHNIQUES**

**3.0 Credits**

This course provides a study of specimen collection and techniques for related laboratory procedures routinely performed in medical offices and clinics, including hematology and procedures related to body fluids. (Prerequisites: MED 103, MED 114 and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)

### **MED 114 MEDICAL ASSISTING CLINICAL PROCEDURES**

**4.0 Credits**

This course covers examination room techniques, including vital signs, specialty examination, minor surgical techniques and emergency procedures. (Prerequisites: MED 103, MED 104 and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)

**MED 117 CLINICAL PRACTICE****5.0 Credits**

This course provides practical application of administrative and clinical skills in medical facility environments. *(Prerequisites: MED 109, MED 112, MED 114 and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)*

**MED 124 MEDICAL COMPUTER PRACTICUM****3.0 Credits**

This course covers the use of medical software for accounting, billing, and patient records. *(Prerequisites: CPT 101 or 170, MED 103, MED 104 and acceptance into the Medical Assisting or Medical Office Administrative Assistant Program)*

**MET 105 DC AND AC ELECTRICITY****4.0 Credits**

This course covers the fundamentals of DC and AC, including resistance, current, voltage, inductive reactance, capacitive reactance, and impedance. Emphasis is placed on electrical equipment such as DC and AC motors and generators, electrical switch gear, and transformers.

**MET 216 MECHANICS FLUID SYSTEMS****3.0 Credits**

This course is the study of the fundamentals of incompressible fluid statics and flow dynamics based on Bernoulli's principle and the conservation of mass, energy, and momentum. These principles are taught from a fluid systems standpoint. *(Prerequisites: EGR 120, MAT 111, PHY 201)*

**MET 217 DYNAMICS AND KINEMATICS****3.0 Credits**

This course examines rigid body motion from applied forces and moments, displacement, velocity and acceleration versus mass, force, and momentum. Kinematics is introduced, with motion calculations of mechanical linkage points. *(Prerequisites: EGR 120, MAT 111, PHY 201)*

**MET 223 THERMODYNAMIC SYSTEMS****3.0 Credits**

This course is a study of energy movement in physical systems, the resulting variations in temperature, pressure, and volume. Emphasis is placed on mathematical characterization of cycles, interpretation and application of thermodynamic tables. *(Prerequisites: EGR 120, MAT 110)*

**MET 224 HYDRAULICS AND PNEUMATICS****3.0 Credits**

This course covers basic hydraulic and pneumatic principles and circuits. System components such as pumps, compressors, piping, valves, cylinders, fluid motors, accumulators and receivers are discussed. *(Prerequisites: EGR 120, MAT 110)*

**MET 225 FUNDAMENTALS OF HEAT TRANSFER****3.0 Credits**

This course studies thermal energy transfer from hot to cold bodies by conduction, convection and radiation. Thermal equilibrium and the basic governing equations for the rate of thermal energy transfer will be emphasized. Applications will span a variety of materials, geometries and environments. *(Prerequisites: EGR 120, MAT 110)*

**MET 227 INSTRUMENTATION PRINCIPLES****2.0 Credits**

This course covers the selection, application and calibration of valves, sensors, transmitters, recorders, and other devices used to measure and control fluid level, pressure, flow, density, temperature, and humidity in an industrial environment. *(Prerequisite: EGR 120)*

- MET 240 MECHANICAL SENIOR PROJECT** **1.0 Credits**  
 This course includes investigations and/or advanced study in an area of specialization approved by the instructor.
- MET 235 MANUFACTURING ENGINEERING PRICIPLES** **2.0 Credits**  
 This course covers the analysis of the management of manufacturing using the tools of work cell design, standards, process planning, inventory control, and quality control. It includes analytical decision making and planning techniques.
- MET 250 SPECIAL TOPICS IN MECHANICAL TECHNOLOGY** **4.0 Credits**  
 This course provides a survey of mechanical technology. Topics include work, energy, fluids, fluid dynamics, fluid systems, Bernoulli's equation, open vs. closed systems, thermal power, elementary heat transfer, etc. *(Prerequisite: MAT 102)*
- MGT 101 PRINCIPLES OF MANAGEMENT** **3.0 Credits**  
 This course is a study of management theories, emphasizing the management functions of planning, decision making, organizing, leading, and controlling. *(Prerequisite: RDG 100)*
- MGT 120 SMALL BUSINESS MANAGEMENT** **3.0 Credits**  
 This course is a study of small business management and organization, forms of ownership, and the process of starting a new business. *(Prerequisite: RDG 100)*
- MGT 201 HUMAN RESOURCE MANAGEMENT** **3.0 Credits**  
 This course is a study of personnel administration functions within a business organization. Major areas of study include job analysis; recruitment, selection and assessment of personnel; and wage, salary and benefit administration. *(Prerequisite: ENG 101)*
- MGT 206 MANAGEMENT SPREADSHEETS** **3.0 Credits**  
 This course emphasizes the use of spreadsheet software to support managerial decision-making through the analysis of data. *(Prerequisite: CPT 101 or CPT 170)*
- MGT 215 PROJECT MANAGEMENT** **3.0 Credits**  
 This course is the study of integrated project management. Emphasis is on the methods and software used in managing projects, including project scope, planning, scheduling, budgeting, and control and evaluation to achieve project objectives. *(Prerequisites: MGT 101, CPT 101 or CPT 170)*
- MGT 220 OPERATIONS MANAGEMENT I** **3.0 Credits**  
 This course introduces students to the concepts and practices that comprise operations management, including supply chain management. This course provides an overview of operating decisions and practices in multiple industry environments including manufacturing and service-oriented businesses. *(Prerequisite: MGT 101)*
- MGT 240 MANAGEMENT DECISION MAKING** **3.0 Credits**  
 This course is a study of various structured approaches to managerial decision making. The student will apply knowledge acquired in previous course work since this is the capstone course for the Management degree. *(Prerequisites: BUS 130, MGT 220, ACC 102, MKT 101)*

- MGT 250 SITUATIONAL SUPERVISION** **3.0 Credits**  
This course is a study of techniques supervisors use to adjust their management styles to different situations and employees. *(Prerequisite: MGT 101 or MGT 201)*
- MKT 101 MARKETING** **3.0 Credits**  
This course covers an introduction to the field of marketing with a detailed study of the marketing concept and the processes of product development, pricing, promotion, and marketing distribution. *(Prerequisite: RDG 100)*
- MKT 110 RETAILING** **3.0 Credits**  
This course is a study of the importance of retailing in American business and covers the concepts of store location, layout, merchandising, display, pricing, inventory control, promotional programs and profit management. *(Prerequisite: MKT 101)*
- MKT 111 MEDIA RELATIONS** **3.0 Credits**  
This course is a study of building and managing effective media relationships through the application of networking, press releases, public relations strategies, and media interviewing skills. *(Prerequisites: ENG 101, MKT 101)*
- MKT 120 SALES PRINCIPLES** **3.0 Credits**  
This course is a study of the personal selling process with special emphasis on determining customer needs and developing effective communications and presentation skills. *(Prerequisite: ENG 101)*
- MKT 135 CUSTOMER SERVICE TECHNIQUES** **3.0 Credits**  
This course is a study of the techniques and skills required for providing customer service excellence, including illustrations to turn customer relations into high standards of customer service, satisfaction, and repeat sales. *(Prerequisite: RDG 100)*
- MKT 140 E-MARKETING** **3.0 Credits**  
This course is a study of electronic marketing. In addition to traditional marketing topics, special emphasis will be placed on internet marketing fundamentals, strategies, and trends. *(Prerequisite: MKT 101, CPT 101 or CPT 170)*
- MKT 240 ADVERTISING** **3.0 Credits**  
This course is a study of the role of advertising in the marketing of goods and service, including types of advertising, media, how advertising is created, agency functions, and regulatory aspects of advertising. *(Prerequisite: ARV 121, MKT 101)*
- MKT 245 PROMOTIONAL STRATEGIES** **3.0 Credits**  
This course is a study of promotion activities, focusing on coordinating an effective marketing campaign for a product or business, with promotion strategies planned and used to influence consumers, trade intermediaries, and sales forces. Special emphasis is placed on the marketing needs of the entrepreneur. *(Prerequisites: ENG 101, CPT 101 or CPT 170)*
- MKT 260 MARKETING MANAGEMENT** **3.0 Credits**  
This course is a study of the marketing system from the decision-maker's view, including how marketing strategies are planned and utilized in the market place. Since this



- MLT 230    ADVANCED CLINICAL CHEMISTRY** **4.0 Credits**  
This course includes advanced theory, principles, and instrument techniques used in clinical chemistry. *(Prerequisite: MLT 130)*
- MLT 260    CLINICAL PRACTICUM I** **3.0 Credits**  
This course provides clinical experience in a supervised setting for developing technical proficiency in routine laboratory procedures. *(Prerequisites: MLT 108, MLT 210)*
- MLT 270    CLINICAL APPLICATIONS** **12.0 Credits**  
This course provides sequential practical experience in selected areas of a supervised clinical setting. *(Prerequisites: MLT 120, MLT 205, MLT 230, MLT 260)*
- MTT 105    MACHINE TOOL MATH APPLICATIONS** **3.0 Credits**  
This course is a study of shop math relevant to the machine tool trade. *(Prerequisites: MTT 152, MAT 170)*
- MTT 106    MACHINE TOOL COMPUTER APPLICATIONS** **3.0 Credits**  
This course is a study of basic computer applications that are used in machining industries. Topics will include word processing, ASCII text editing, spreadsheets, locating information on the internet and serial communication concepts. *(Prerequisites: MTT 152, MAT 170, MTT 120)*
- MTT 120    MACHINE TOOL PRINT READING** **3.0 Credits**  
This course is designed to develop the basic skills and terminology required for visualization and interpretation of common prints used in the machine tool trades. *(Prerequisites: Mat 170 (Must make a "C" or higher), RDG 100)*
- MTT 141    METALS AND HEAT TREATMENT** **3.0 Credits**  
This course is a study of the properties, characteristics, and heat treatment procedures of metals. *(Prerequisites: MTT 151, MTT 105, MTT 106 with a grade of "C" or better)*
- MTT 151    PRECISION MACHINING I** **3.0 Credits**  
This course is an introduction to basic machine shop practices with emphasis on safety, hand tools, band saws, drill presses and measuring tools. *(Prerequisites: MAT 170 (Must make a "C" or higher, RDG 100)*
- MTT 152    PRECISION MACHINING II** **3.0 Credits**  
This course is an introduction to the operation of basic machine shop equipment with emphasis on milling machines and surface grinders. *(Prerequisite: MTT 151 with a grade of "C" or better)*
- MTT 153    PRECISION MACHINING III** **3.0 Credits**  
This course is an introduction to the operation of basic machine shop equipment with emphasis on lathes. *(Prerequisites: MTT 152, MAT 170 with a grade of "C" or better)*
- MTT 154    PRECISION MACHINING IV** **3.0 Credits**  
This course is a study of techniques used to produce more complex precision plant parts that require multiple machine tools. *(Prerequisite: MTT 153 with a grade of "C" or better)*

- MTT 155 PRECISION GRINDING** **3.0 Credits**  
This course is a study of theoretical and practical training in cylindrical grinding, advanced surface grinding operations and cutter grinding techniques. *(Prerequisites: MTT 105, MTT 154 with a grade of "C" or better)*
- MTT 171 INDUSTRIAL QUALITY CONTROL** **2.0 Credits**  
This course covers the methods and procedures of quality control. *(Prerequisites: MTT 252, SPC 209 with a grade of "C" or better)*
- MTT 212 TOOL DESIGN** **4.0 Credits**  
This course is a study of the development, material selection, manufacturing and machining procedures necessary in the production of tools and tooling. *(Prerequisites: MTT 154, MTT 105, MTT 106 with a grade of "C" or better)*
- MTT 215 TOOL ROOM MACHINING I** **4.0 Credits**  
This course covers advanced machine tool operations, including an introduction to basic die making. *(Prerequisites: MTT 155, MTT 141 with a grade of "C" or better)*
- MTT 216 TOOL ROOM MACHINING II** **4.0 Credits**  
This course covers advanced machine tool operations, including complex die operations. *(Prerequisite: MTT 215 with a grade of "C" or better)*
- MTT 246 PLASTIC MOLDMAKING I** **2.0 Credits**  
This course is an introduction to mold making and plastics. *(Prerequisites: MTT 155, MTT 250 with a grade of "C" or better)*
- MTT 250 PRINCIPLES OF CNC** **3.0 Credits**  
This course is an introduction to the coding used in CNC Programming. *(Prerequisites: MTT 105, MTT 106, MTT 154 with a grade of "C" or better)*
- MTT 252 CNC SETUP AND OPERATIONS** **4.0 Credits**  
This course covers CNC setup and operations. *(Prerequisites: MTT 155, MTT 250, MTT 212 with a grade of "C" or better)*
- MTT 253 CNC PROGRAMMING AND OPERATIONS** **3.0 Credits**  
This course is a study of the planning, programming, selecting tooling, determining speeds and feeds, setting up, operating and testing of CNC programs on CNC machines. *(Prerequisite: MTT 252 with a grade of "C" or better)*
- MTT 258 MACHINE TOOL CAM** **3.0 Credits**  
This course is a study of computer assisted manufacturing graphics systems needed to create CNC programs. *(Prerequisites: MTT 246, MTT 252 with a grade of "C" or better)*
- MUS 105 MUSIC APPRECIATION** **3.0 Credits**  
This course is an introduction to the study of music with focus on the elements of music and their relationships, the musical characteristics of representative works and composers, common musical forms and genres of various Western and non-Western historical style periods, and appropriate listening experiences. *(Prerequisite: RDG 100)*

**MUS 106 INTRODUCTION TO GUITAR****1.0 Credit**

This course introduces students to basic principles of guitar playing.

**MUS 110 MUSIC FUNDAMENTALS****3.0 Credits**

This course is an introduction to the elements of music and music notation with keyboard applications. Topics covered include intervals, scales, rhythm, meter, elementary ear training and basic keyboard harmony. *(Prerequisite: RDG 100)*

**MUS 115 MUSIC THEORY I****3.0 Credits**

A study of Western tonal music theory including a review of music fundamentals, construction of triad and seventh chords, four-part writing, voice leading, and counterpoint. *(Prerequisites: RDG 100, ENG 100, or equivalent test score)*

**NET 112 NUCLEAR POWER PLANT COMPONENTS****3.0 Credits**

This course is a study of basic nuclear power plant components including valves, sensors, detectors, controllers, pumps, heat exchangers, demineralizers, ion exchangers and other related systems. *(Prerequisite: MAT 102)*

**NET 122 ELECTRICAL SCIENCES****3.0 Credits**

This course is a study of basic electricity for nuclear power plant technicians. Topics include conductors, semiconductors, insulators, voltage, current resistance, Ohm's law, Kirchoff's Voltage Law (KVL), Kirchoff's Current Law (KCL), basic circuit theory and related topics. *(Prerequisites: MAT 110, EGR 120, MET 225 or MET 223)*

**NET 130 RADIOLOGICAL PROTECTION****3.0 Credits**

This course is a study of basic radiological protection principles. Topics include detectors, basic nuclear instrumentation, portable survey equipment and related topics in radiation protection protocols. *(Prerequisite: MAT 110)*

**NET 210 THERMAL SCIENCES****3.0 Credits**

This course is a study of basic thermal science for nuclear power plant operator training. Topics include monitoring and control of primary and secondary plant systems, basic concepts in heat transfer and the laws of thermodynamics. *(Prerequisites: MAT 110, EGR 120, MET 225 or MET 223)*

**NET 225 NUCLEAR REACTOR THEORY****3.0 Credits**

This course is a study of basic reactor theory for nuclear power plant operator training. Topics include neutron kinetics, reactor period and start-up rates, fuel nuclides, the in-hour equation and the quasi equilibrium power model. *(Prerequisites: MAT 110, EGR 205)*

**NET 230 NUCLEAR PLANT CHEMISTRY****3.0 Credits**

This course is a study of basic nuclear plant chemistry including nitrogen reactions, lithium production, radio nuclides, chemical additives, filtration, ion exchange and related topics in nuclear chemistry. *(Prerequisites: CHM 106 or CHM 110, MAT 110)*

**NET 240 NUCLEAR PRIMARY AND SECONDARY SYSTEMS****3.0 Credits**

This course is a study of the relationship between primary and secondary power plant systems. The management and control of such systems are also discussed. *(Prerequisites: NET 112, NET 210, NET 225, MET 216)*

- NMT 100 PREPARATION FOR CLINICAL** **6.0 Credits**  
This course will prepare nuclear medicine students for the clinical environment within the hospital, prior to beginning rotations. *(Prerequisite: Acceptance into Nuclear Medicine Technology program)*
- NMT 101 INTRODUCTION TO NUCLEAR MEDICINE** **2.0 Credits**  
This course is a study of the overall basics of nuclear medicine technology. This course includes patient care, ethics, medical-legal issues and the history of nuclear medicine. *(Prerequisite: Acceptance into Nuclear Medicine Technology program)*
- NMT 102 NUCLEAR MEDICINE PROCEDURES I** **2.0 Credits**  
This course is a study of didactic concepts for the practice of clinical nuclear medicine. Topics include: nuclear cardiology, ventilation and perfusion lung imaging, skeletal imaging, liver and hepatobiliary imaging. *(Prerequisite: Acceptance into Nuclear Medicine Technology program)*
- NMT 103 NUCLEAR MEDICINE PHYSICS** **2.0 Credits**  
This course is a study of the basic math and statistical skills necessary to perform nuclear physics problems. The knowledge and application of radiation safety, radiobiology and protection will be covered. *(Prerequisite: Acceptance into Nuclear Medicine Technology program)*
- NMT 104 NUCLEAR MEDICINE PROCEDURES II** **2.0 Credits**  
This course is a study of background knowledge for application of nuclear medicine procedures. Topics include: endocrinology, renal imaging, infection and tumor imaging. *(Prerequisite: NMT 102 with minimum grade of "C")*
- NMT 105 QUALITY ASSURANCE METHODOLOGY** **2.0 Credits**  
This course covers the information necessary to plan and implement procedures that will satisfy quality assurance standards. Topics covered include radiopharmacy and quality management. *(Prerequisite: NMT 103 with minimum grade of "C")*
- NMT 106 NUCLEAR MEDICINE PROCEDURES III** **2.0 Credits**  
This course covers theory and principles of non-imaging procedures. *(Prerequisite: NMT 104 with minimum grade of "C")*
- NMT 107 NUCLEAR MEDICINE INSTRUMENTATION** **3.0 Credits**  
This course covers the theory and application of radiation detection instruments. Topics include quality assurance and methodology of nuclear medicine equipment. *(Prerequisite: NMT 103 with minimum grade of "C")*
- NMT 109 SPECIAL TOPICS IN NUCLEAR MEDICINE** **2.0 Credits**  
This course covers a variety of special topics in nuclear medicine. This course includes registry preparation. *(Prerequisite: NMT 105 with minimum grade of "C")*
- NMT 150 APPLIED NUCLEAR MEDICINE I** **8.0 Credits**  
This course covers the application of nuclear medicine. *(Prerequisite: Acceptance into Nuclear Medicine Technology program)*

- NMT 151 APPLIED NUCLEAR MEDICINE II** **8.0 Credits**  
 This course covers difficult and challenging clinical applications of nuclear medicine theory. *(Prerequisite: NMT 150 with minimum grade of "C")*
- NMT 152 APPLIED NUCLEAR MEDICINE III** **6.0 Credits**  
 This course covers challenging and difficult applications of nuclear medicine theory. *(Prerequisite: NMT 151 with minimum grade of "C")*
- NUR 100 PRE-NURSING (NON-DEGREE CREDIT)** **1.0 Credit**  
 This course covers an exploration of nursing as a possible career choice.
- NUR 115 BASIC CONCEPTS IN NURSING** **2.0 Credits**  
 This course introduces the student to the profession of nursing through both classroom and limited lab/clinical experiences. *(Prerequisites: ENG 100, RDG 100)*
- NUR 131 INTRODUCTION TO PHARMACOLOGY** **1.0 Credit**  
 This course is a study of drug calculations and basic concepts of pharmacology. *(Prerequisite: MAT 101)*
- NUR 134 BEGINNING NURSING SKILLS** **5.0 Credits**  
 This course is a study of beginning nursing skills. The course prepares the student to assist in patient care and function as an efficient member of the nursing team. *(Prerequisites: BIO 210, ENG 101, PSY 201, MAT 102 (PN), and either MAT 120 (ADN) or MAT 110 (ADN))*
- NUR 141 PHARMACOLOGICAL THERAPIES I** **2.0 Credits**  
 This course introduces the role of the nurse in the safe and effective administration of medications. *(Prerequisites: NUR 131 and NUR 134) (Corequisite: NUR 155)*
- NUR 155 CONTEMPORARY NURSING PRACTICE I** **6.0 Credits**  
 This course provides further development of proficiency in nursing care of individuals experiencing commonly occurring health problems with predictable outcomes. *(Prerequisite: NUR 134) (Co-Requisite: NUR 141)*
- NUR 158 HEALTH PROMOTION FOR FAMILIES I** **4.0 Credits**  
 This course focuses on nursing care of the childbearing and childrearing families experiencing normal developmental changes and common health problems. *(Prerequisites: NUR 155, NUR 141)*
- NUR 162 PSYCHIATRIC AND MENTAL HEALTH NURSING** **3.0 Credits**  
 This course covers application of critical thinking skills and nursing concepts in the care of adult clients with selected mental health problems in a variety of settings. The course includes the study of dynamics of human behavior ranging from normal to extreme. *(Prerequisites: One of the following sequences with a minimum grade of "C:" ENG 101, PSY 203, BIO 210, BIO 211, and either MAT 110 or a higher level Math course.)*
- NUR 166 ISSUES IN PRACTICAL NURSING** **1.0 Credit**  
 This course addresses current issues for the practical nurse.

**NUR 201 TRANSITION NURSING****3.0 Credits**

This course facilitates the transition of the Practical Nurse graduate to the role of Associate Degree Nursing student. (*Prerequisites: BIO 210, ENG 101, PSY 201 with a minimum grade of "C," acceptance into the Nursing program and have an active SC LPN license*)

**NUR 203 TRANSITION FOR LICENSED PRACTICAL NURSES****1.0 Credit**

This course assists licensed practical nurses in their transition to the role of the associate degree nursing student. (*Prerequisites: BIO 210, ENG 101, PSY 201 with a minimum grade of "C," acceptance into the Nursing program and have an active SC LPN license*)

**NUR 208 HEALTH PROMOTION FOR FAMILIES II****4.0 Credits**

This course focuses on reproductive health and nursing care of the childbearing and childrearing families experiencing acute and chronic health problems in the acute care setting. (*Prerequisite: NUR 158*)

**NUR 215 MANAGEMENT OF PATIENT CARE****5.0 Credits**

This course facilitates nursing care of small groups of patients utilizing the nursing process and concepts of management. (*Prerequisites: NUR 255, NUR 208*)

**NUR 235 CONTEMPORARY MEDICAL SURGICAL NURSING CONCEPTS****5.0 CREDIT**

This course advances the development of the practical nurse in providing medical surgical care for individuals with complex health problems with predictable outcomes. (*Prerequisite: NUR 155, NUR 141*)

**NUR 255 CONTEMPORARY NURSING PRACTICE II****5.0 Credits**

This course develops clinical reasoning necessary for holistic care of individuals and families experiencing health related concerns with predictable and unpredictable outcomes. (*Prerequisite: NUR 235*)

**NUR 270 PRINCIPLES OF MANAGEMENT AND LEADERSHIP****5.0 Credits**

This course focuses on concepts and competencies related to role development, leadership and management skills, legal and ethical issues, and professional values and behaviors of the registered nurse.

**PHI 101 INTRODUCTION TO PHILOSOPHY****3.0 Credits**

This course includes a topical survey of the three main branches of philosophy — epistemology, metaphysics, and ethics — and the contemporary questions related to these fields. (*Prerequisites: RDG 100, ENG 100*)

**PHI 105 INTRODUCTION TO LOGIC****3.0 Credits**

This course is an introduction to the structure of argument, including symbolization, proofs, formal fallacies, deductions, and inductions. (*Prerequisites: RDG 100, MAT 102*)

**PHI 106 LOGIC II INDUCTIVE REASONING****3.0 Credits**

This elementary logic course is an introduction to inductive reasoning. Patterns of inductive reasoning including analogical reasoning, inductive generalizations, scientific reasoning, and causal reasoning will be examined. Probability theory, decision

analysis, and the criteria for the acceptability of inductive arguments will be covered also. *(Prerequisites: RDG 100, MAT 102)*

**PHI 115 CONTEMPORARY MORAL ISSUES 3.0 Credits**

This course examines moral issues in contemporary society, including basic principles and applications of ethics. *(Prerequisites: RDG 100, ENG 100)*

**PHM 101 INTRODUCTION TO PHARMACY 3.0 Credits**

This course provides a study of and introduction to pharmacy and the role in providing patient care services. *(Prerequisite: Acceptance to PHM Certificate)*

**PHM 110 PHARMACY PRACTICE 4.0 Credits**

This course provides a study of theory and practice in procuring, manipulating, and preparing drugs for dispensing. *(Prerequisites: PHM 101, PHM 113)*

**PHM 113 PHARMACY TECHNICIAN MATH 3.0 Credits**

This course includes a review of basic mathematics focusing on its application to common pharmaceutical calculations. *(Prerequisite: Acceptance into Pharmacy Technology program)*

**PHM 114 THERAPEUTIC AGENTS I 3.0 Credits**

This course provides an introductory study of therapeutic drug categories. *(Prerequisites: PHM 101; Acceptance to PHM Certificate or Diploma Program)*

**PHM 124 THERAPEUTIC AGENTS II 3.0 Credits**

This course includes a study of therapeutic drug categories. *(Prerequisite: PHM 114)*

**PHM 152 PHARMACY TECHNICIAN PRACTICUM I 2.0 Credits**

This course provides a practical introduction to the pharmacy environment. *(Prerequisites: PHM 101, PHM 113)*

**PHM 164 PHARMACY TECHNICIAN PRACTICUM II 4.0 Credits**

This course provides practical application of pharmacy skills in pharmacy environments. *(Prerequisite: PHM 152)*

**PHS 111 CONCEPTUAL PHYSICS I 3.0 Credits**

This course is an introduction to the mechanical concepts of distance, time, mass, force, energy and power. *(Prerequisite: MAT 100 or MAT 152)*

**PHS 115 INTEGRATED SCIENCE 4.0 Credits**

This course contains topics taken from general chemistry and general physics. *(Prerequisite: MAT 102)*

**PHY 201 PHYSICS I 4.0 Credits**

This is the first in a sequence of physics courses. Topics include mechanics, wave motion, sound, heat, electromagnetism, optics, and modern physics. *(Prerequisites: RDG 100, MAT 110)*

**PHY 202 PHYSICS II****4.0 Credits**

This course covers physics topics, including mechanics, wave motion, sound, heat, electromagnetism, optics and modern physics. *(Prerequisite: PHY 201)*

**PHY 221 UNIVERSITY PHYSICS I****4.0 Credits**

This is the first of a sequence of courses. The course includes a calculus based treatment of the following topics: vectors, laws of motion, rotation, vibratory, and wave motion. *(Prerequisite: MAT 140)*

**PHY 222 UNIVERSITY PHYSICS II****4.0 Credits**

This course is a continuation of calculus based treatment of the following topics: thermodynamics, kinetic theory of gases, electricity and magnetism, including electrostatics, dielectrics, electric circuits, magnetic fields, and induction phenomena. *(Prerequisites: MAT 141, PHY 221)*

**PSC 201 AMERICAN GOVERNMENT****3.0 Credits**

This course is a study of national governmental institutions with emphasis on the Constitution, the functions of executive, legislative and judicial branches, civil liberties and the role of the electorate. The impact of current events on the national government civil liberties, public opinion, news media, and voters is emphasized. *(Prerequisites: RDG 100, ENG 100)*

**PSC 205 POLITICS AND GOVERNMENT****3.0 Credits**

This course is a study of the concepts and problems involved in man's relationships with governments and political change. This course emphasizes comparative institutions of government, analysis of political behavior, and political ideology. *(Prerequisites: RDG 100, ENG 032)*

**PSC 206 POLITICS OF THE MIDDLE EAST****3.0 Credits**

This course examines the domestic and international politics of countries in the Middle East. Coursework compares political systems in the region and factors such as economics, religion, and societal divisions that influence both domestic politics and external relations of the countries. *(Prerequisites: RDG 100, ENG 032)*

**PSC 215 STATE AND LOCAL GOVERNMENT****3.0 Credits**

This course is a study of state, county and municipal government systems, including interrelationships between these systems and within the federal government. The impact of current events on the state and local governments and institutions is emphasized. *(Prerequisites: RDG 100, ENG 100)*

**PSC 220 INTRODUCTION TO INTERNATIONAL RELATIONS****3.0 Credits**

This course introduces the major focus and factors influencing world affairs, with emphasis on the role of the United States in the global community and the impact of growing interdependence on daily living. *(Prerequisites: RDG 100, ENG 032)*

**PSC 225 POLITICAL PARTIES, CAMPAIGNS, & ELECTIONS****3.0 Credits**

This course will focus on the dominant two-party system in U.S. politics, the federal campaign and election system, and electoral campaign races. The course will trace the evolution of political parties in the U.S., as well as focus on how campaigns are mounted and won. *(Prerequisites: RDG 100, ENG 032)*

**PSY 201 GENERAL PSYCHOLOGY****3.0 Credits**

This course includes the following topics and concepts in the science of behavior: scientific method, biological bases for behavior, perception, motivation, learning, memory, development, personality, abnormal behavior, therapeutic techniques and social psychology. *(Prerequisites: RDG 100, ENG 032)*

**PSY 203 HUMAN GROWTH AND DEVELOPMENT****3.0 Credits**

This course is a study of the physical, cognitive, and social factors affecting human growth, development, and potential. *(Prerequisites: PSY 201 with a "C" or better, ENG 100)*

**PSY 212 ABNORMAL PSYCHOLOGY****3.0 Credits**

This course is a study of the nature and development of behavioral disorders, including the investigation of contemporary treatment procedures. In depth review of the etiology, diagnosis and treatment of psychological disorders; the psychological, biological and sociocultural perspectives on these disorders; and the efficacy of various treatment approaches is included. *(Prerequisites: PSY 201 with a "C" or better, ENG 100)*

**PSY 218 BEHAVIOR MODIFICATION****3.0 Credits**

This course is an introduction to the terminology, methods, and procedures used in behavior modification, including the application of these procedures and techniques in specific areas of human services. Focus of study is on the application of change techniques to human behavior across both personal and professional domains. *(Prerequisites: PSY 201 with a "C" or better, ENG 100)*

**PSY 220 PSYCHOLOGY OF PERSONALITY****3.0 Credits**

This course is the study of classical and modern theories of personality. Research Implications are evaluated. *(Prerequisites: PSY 201 with a "C" or better, ENG 100)*

**PSY 225 SOCIAL PSYCHOLOGY****3.0 Credits**

This course is a study of individual behavior as influenced by social roles, group identification, attitudes, and values. *(Prerequisites: PSY 201 with a "C" or better, ENG 100)*

**PSY 240 ETHNICITY AND MINORITY ISSUES****3.0 Credits**

This course is a study of cultural and minority characteristics influencing individual and interpersonal behaviors, with emphasis on social, educational, economic, and environmental factors. *(Prerequisites: PSY 201, SOC 101 with a "C" or better)*

**PTH 101 PHYSICAL THERAPY PROFESSIONAL PREPARATION 2.0 Credits**

This course introduces the purpose, philosophy and history of physical therapy and medical/legal documentation. *(Prerequisite: Acceptance into the Physical Therapist Assistant program)*

**PTH 202 PHYSICAL THERAPY MODALITIES****4.0 Credits**

This course introduces patient care techniques, including patient preparation and therapeutic hot/cold modalities. *(Prerequisite: PTH 204)*

**PTH 204 PHYSICAL THERAPY FUNCTIONAL ANATOMY AND APPLICATION** **5.0 Credits**

The course introduces the basic concepts and principles of muscles, joints and motion. Emphasis is placed on the development of competence in goniometry, manual muscle testing, and traditional testing necessary to plan for patient treatment. *(Prerequisite: Acceptance into the Physical Therapist Assistant Program)*

**PTH 206 THERAPEUTIC PROCEDURES** **2.0 Credits**

This course introduces the rationale and skills for patient therapeutic procedures, including basic exercises, gait training and other skills necessary to patient treatment. *(Prerequisite: PTH 101)*

**PTH 221 PATHOLOGY I** **2.0 Credits**

This course is an introduction to basic pathophysiology of the body with the emphasis on the body's reaction to disease and injury. *(Prerequisite: PTH 101)*

**PTH 222 PATHOLOGY II** **2.0 Credits**

This course is a continuation of the pathologies commonly treated in physical therapy with emphasis on etiology, clinical picture, diagnosis and treatment. *(Prerequisite: PTH 101)*

**PTH 225 ELECTROTHERAPY** **2.0 Credits**

This course provides a study of the rationale, contraindications, and application techniques of various electrical equipment. *(Prerequisite: PTH 204)*

**PTH 226 THERAPEUTIC EXERCISES** **3.0 Credits**

This course provides a study of the rationale, contraindications and exercise skills needed to develop appropriate exercise programs. *(Prerequisite: PTH 204)*

**PTH 244 REHABILITATION** **4.0 Credits**

This course introduces neurological principles, pathology, and specialized rehabilitation techniques for pediatric and adult care. *(Prerequisites: PTH 204, PTH 206)*

**PTH 252 CLINICAL PRACTICE** **2.0 Credits**

This course introduces the elementary clinical procedures involved in the patient care setting. *(Prerequisite: PTH 204)*

**PTH 253 CLINICAL PRACTICE II** **3.0 Credits**

This course involves the student's participation in the basic treatment techniques of physical therapy, intensified in both the clinic and classroom setting. *(Prerequisite: PTH 252)*

**PTH 266 PHYSICAL THERAPY PRACTICUM I** **5.0 Credits**

This course includes patient treatments under the direct supervision of a licensed physical therapist and/or a licensed physical therapist assistant. *(Prerequisite: PTH 253)*

**PTH 276 PHYSICAL THERAPY PRACTICUM II** **6.0 Credits**

This course includes practicum experience in a clinical setting using advanced skills under the supervision of a licensed physical therapist and/or a licensed physical therapist assistant. *(Prerequisite: PTH 252)*

- QAT 102 QUALITY CONCEPTS AND TECHNIQUES** **3.0 Credits**  
This course covers the basic theory and concepts of quality. The total quality systems, basic statistics, variable control charts, and the commitment to quality are emphasized. *(Prerequisite: MAT 101 or MAT 152)*
- RAD 100 CLINICAL PREPARATION** **3.0 Credits**  
This course will prepare students for the actual clinical rotations required of full-time radiology students. Orientation to the hospital and radiology department will be covered. *(Prerequisite: Acceptance into Radiology Technology program)*
- RAD 101 INTRODUCTION TO RADIOGRAPHY** **2.0 Credits**  
This course provides an introduction to radiologic technology with emphasis on orientation to the radiology department, ethics, and basic radiation protection. *(Prerequisites: AHS 102, acceptance into Radiology Technology program)*
- RAD 102 RADIOLOGY PATIENT CARE PROCEDURES** **2.0 Credits**  
This course provides a study of the procedures and techniques used in the care of the diagnostic imaging patient. *(Prerequisite: Acceptance into Radiology Technology program)*
- RAD 103 INTRODUCTION TO COMPUTED TOMOGRAPHY** **2.0 Credits**  
This course is a study of the technological developments behind computed tomography, an overview of scanner components, terminology, data acquisition, digital imaging, image reconstruction, display and manipulations. Current applications will be explored, including patient screening, contract utilization and administration, contrast reactions and treatment, pediatrics, conscious sedation and monitoring, and radiation protection. *(Prerequisite: Acceptance into the Computed Tomography Program)*
- RAD 104 INTRODUCTION TO PHYSICS** **1.0 Credit**  
This course provides an overview of mathematical applications, unit conversions, and a basic overview of theory and principles as they relate to physics. *(Prerequisite: Acceptance into Nuclear Medicine Technology program)*
- RAD 105 RADIOGRAPHIC ANATOMY** **4.0 Credits**  
This course includes the study of the structures of the human body and the normal function of its systems. Special emphasis is placed on radiographic anatomy. *(Prerequisite: BIO 210 or 211; Acceptance into Radiology Technology program)*
- RAD 106 PATIENT CARE IN COMPUTED TOMOGRAPHY** **1.0 Credit**  
This course provides the techniques of proper patient care in Computed Tomography. This course explores the use of contrast media and power injectors, and the adverse allergic reaction to contrast media. Lab tests and values are explained. *(Prerequisite: Acceptance into the Computed Tomography Program)*
- RAD 110 RADIOGRAPHIC IMAGING I** **3.0 Credits**  
This course provides detailed study of the parameters controlling radiation quality and quantity for radiographic tube operation and image production. *(Prerequisite: RAD 101)*

- RAD 115 RADIOGRAPHIC IMAGING II** **3.0 Credits**  
This course continues a detailed study of primary and secondary influencing factors and accessory equipment related to imaging. *(Prerequisite: RAD 110)*
- RAD 120 PRINCIPLES OF COMPUTED TOMOGRAPHY** **3.0 Credits**  
This course is a study of assurance procedures, and radiation dosimetry in computed tomography. Special applications of computer tomography will be explored including interventional procedures, high speed CT scanning, 3 dimensional CT and multi-planar reformations. A review of special scanner features will also be covered in the course. *(Prerequisites: AHS 206 and RAD 103)*
- RAD 121 RADIOGRAPHIC PHYSICS** **4.0 Credits**  
This course introduces the principles of radiographic physics, incorporating theory and application of the basic principles underlying the operation and maintenance of X-ray equipment. *(Prerequisite: RAD 115)*
- RAD 130 RADIOGRAPHIC PROCEDURES I** **3.0 Credits**  
This course provides an introduction to radiographic procedures. Positioning of the chest, abdomen, and extremities are included. *(Prerequisite: RAD 102)*
- RAD 136 RADIOGRAPHIC PROCEDURES II** **3.0 Credits**  
This course is a study of radiographic procedures for visualization of the structures of the body. *(Prerequisite: RAD 130)*
- RAD 145 COMPUTED TOMOGRAPHY PHYSICS AND INSTRUMENTATION** **3.0 Credits**  
This course is a study of Computed Tomography physics and instrumentation. The course provides an overview of technology, application, and practice that is unique to the Computed Tomography profession. *(Prerequisites: AHS 206 and RAD 103)*
- RAD 150 CLINICAL APPLICATIONS I** **4.0 Credits**  
This course includes practice of hands-on clinical skills in hospital/outpatient environments. *(Prerequisite: Acceptance to the Computed Tomography Program)*
- RAD 153 APPLIED RADIOGRAPHY I** **3.0 Credits**  
This course introduces the clinical environment of the hospital by providing basic use of radiographic equipment and routine radiographic procedures. *(Prerequisite: Acceptance into Radiology Technology program)*
- RAD 155 APPLIED RADIOGRAPHY I** **5.0 Credits**  
This course introduces the clinical environment of the hospital by providing basic use of radiographic equipment and routine radiographic procedures. *(Prerequisite: RAD 101)*
- RAD 160 CLINICAL APPLICATIONS II** **6.0 Credits**  
This course is a continuation of practice of hands-on clinical skills in hospital/outpatient environments. *(Prerequisite: RAD 150)*

- RAD 165 APPLIED RADIOGRAPHY II** **5.0 Credits**  
This course includes the use of radiographic equipment and performance of radiographic procedures within the clinical environment of the hospital. *(Prerequisite: RAD 155)*
- RAD 205 RADIOGRAPHIC PATHOLOGY** **2.0 Credits**  
This course provides a survey of disease processes significant to the radiographer, including etiology, diagnosis, prognosis, and treatment. *(Prerequisites: RAD 114, RAD 236, RAD 256)*
- RAD 114 RADIOGRAPHIC IMAGING FUNDAMENTALS** **2.0 Credits**  
This course provides advanced instruction in primary and secondary influencing imaging factors and advanced imaging applications. *(Prerequisites: Credentialed Radiologic Technologist)*
- RAD 210 RADIOGRAPHIC IMAGING III** **3.0 Credits**  
This course provides a detailed study of advanced methods and concepts of imaging. *(Prerequisites: RAD 114, RAD 236, RAD 256)*
- RAD 220 SELECTED IMAGING TOPICS** **3.0 Credits**  
This course is a study of advanced topics unique to the radiological sciences. Preparing an in-depth review of all didactic material is included. *(Prerequisite: RAD 235)*
- RAD 225 SELECTED RADIOGRAPHIC TOPICS** **2.0 Credits**  
This course is a study of selected areas related to radiography. Quality assurance, mammography and pathology are also covered. *(Prerequisite: RAD 235)*
- RAD 230 RADIOGRAPHIC PROCEDURES III** **3.0 Credits**  
This course is the study of special radiographic procedures. *(Prerequisites: RAD 114, RAD 236, RAD 256)*
- RAD 235 RADIOGRAPHY SEMINAR I** **1.0 Credit**  
This course is a study of selected areas of radiography that are unique or new to the field. Emphasis will be on radiology and protection. *(Prerequisite: RAD 155)*
- RDG 236 RADIOGRAPHY SEMINAR II** **2.0 Credits**  
This course includes selected areas of radiography that require additional study or application. *(Prerequisites: Credentialed Radiologic Technologist)*
- RAD 256 ADVANCED RADIOGRAPHY I** **3.0 Credits**  
This course includes independently performing routine procedures in a radiology department, including involvement in advanced radiographic procedures. *(Prerequisites: Credentialed Radiologic Technologist)*
- RAD 257 ADVANCED RADIOGRAPHY II** **7.0 Credits**  
This course includes independently performing routine procedures in a radiology department, including involvement in advanced radiographic procedures. *(Prerequisites: RAD 114, RAD 236, RAD 256)*

- RAD 258 ADVANCED RADIOGRAPHY I** **8.0 Credits**  
This course includes independently performing routine procedures in a radiology department, including involvement in advanced radiographic procedures. *(Prerequisite: RAD 165)*
- RAD 268 ADVANCED RADIOGRAPHY II** **8.0 Credits**  
This course includes routine radiographic examinations, as well as advanced procedures, while continuing to build self-confidence in the clinical atmosphere. *(Prerequisite: RAD 258)*
- RAD 284 FLUOROSCOPIC PROCEDURES** **2.0 Credits**  
This course provides emphasis on radiographic fluoroscopy and the equipment necessary to perform fluoroscopic procedures. *(Prerequisite: RAD 258)*
- RAD 285 SPECIAL TOPICS IN COMPUTED TOMOGRAPHY** **1.0 Credit**  
This course is a study of advanced topics unique to Computed Tomography. Several practice registry exams in Computed Tomography will be given in preparation for the ARRT CT Registry Exam. *(Prerequisite: Acceptance into the Computed Tomography Program)*
- RDG 012 DEVELOPMENTAL READING WORKSHOP** **1.0 Credit**  
This course provides support for mastery of Reading 032 competencies.
- RDG 013 DEVELOPMENTAL READING-COMPRESSED** **1.0 Credit**  
This course provides a review, in a compressed time frame, of the comprehension skills studied in RDG 032. Successful completion of this course allows a student to exit Developmental Reading.
- RDG 032 DEVELOPMENTAL READING** **3.0 Credits**  
This course is an intensive review of the academic reading skills needed for success in a college-level course. Students will demonstrate their understanding of reading as a process and will apply strategies learned to expand their reading comprehension skills. Students will demonstrate the ability to integrate knowledge, use context clues, and identify supporting details. *(Prerequisite: Appropriate placement test score)*
- RDG 100 CRITICAL READING** **3.0 Credits**  
This course covers the application of basic reading skills to improve critical comprehension and higher order thinking skills. It gives students extensive practice with analytical and interpretative skills. (This course does not meet the requirements for an associate degree, but may meet requirements for a diploma or certificate. *(Prerequisite: Appropriate placement test score)*)
- RDT 150 CLINICAL PRACTICUM** **5.0 Credits**  
This course includes the use of radiographic equipment and performance of routine radiographic procedures within the clinical office or hospital environment. *(Prerequisite: Program Director Permission)*
- REL 101 INTRODUCTION TO RELIGION** **3.0 Credits**  
This course provides a study of religion and the nature of religious belief and practice. *(Prerequisites: RDG 100, ENG 100)*

- REL 102 INTRODUCTION TO BIBLICAL STUDY 3.0 Credits**  
This course is an introduction to the contemporary analysis of the Bible, including its historical background, writing and transmission, its principal persons and events, and its ideas and their significance for the present. *(Prerequisites: RDG 100, ENG 100)*
- REL 103 COMPARATIVE RELIGION 3.0 Credits**  
This course is an analysis of the religious experience of various persons and groups, East and West, in traditional and contemporary settings. It includes tribal religions, Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. *(Prerequisites: RDG 100, ENG 100)*
- REL 106 INTRODUCTION TO ISLAMIC STUDIES 3.0 Credits**  
This course is an introduction to Islam, its founding, canon, theology, tradition, and literary influence. Topics will also explore the cultural and political impact Islam has had in the Mid-East and most recently in the West. *(Prerequisites: RDG 100, ENG 100)*
- REL 214 RELIGION STUDY ABROAD 3.0 Credits**  
This course provides a study abroad experience for students studying religion. The course includes travel to selected region outside the United States and provides a field study of historical and contemporary religion. *(Prerequisites: RDG 100, ENG 100)*
- RES 101 INTRODUCTION TO RESPIRATORY CARE 3.0 Credits**  
This course includes introduction topics pertinent to entering the respiratory care profession, i.e., medical terminology, ethical issues, and legal issues. Patient assessment and pharmacology for respiratory care is discussed. *(Prerequisite: Acceptance into the Respiratory Therapy program.) (Corequisite: RES 121)*
- RES 110 CARDIOPULMONARY SCIENCE I 2.0 Credits**  
This course focuses on assessment, treatment, and evaluation of patients with cardiopulmonary disease. Also, it includes pediatric respiratory care and microbiology. *(Prerequisites: BIO 112, RES 101, RES 121)*
- RES 111 PATHOPHYSIOLOGY 2.0 Credits**  
This course is a study of the general principles and analysis of normal and diseased states. *(Prerequisites: BIO 112, RES 125)*
- RES 121 RESPIRATORY SKILLS I 4.0 Credits**  
This course includes a study of basic respiratory therapy procedures and their administration. Administration of medical gases, humidity and aerosol, hyperinflation therapy, chest physical therapy, principles of infection control, and blood gas analysis is covered. *(Prerequisite: Acceptance into the Respiratory Therapy program.) (Corequisite: RES 101)*
- RES 125 CARDIOPULMONARY PHYSIOLOGY 2.0 Credits**  
This course is the study of the Physiology of the heart, lungs and related body systems. *(Prerequisites: BIO 112 and/or BIO 211, RES 101, RES 121)*

- RES 131 RESPIRATORY SKILLS II** **4.0 Credits**  
This course is a study of selected respiratory care procedures and applications. Airway care, pulmonary function testing and ECG are covered. *(Prerequisites: BIO 112 and/or BIO 211, RES 101, RES 121)*
- RES 150 CLINICAL APPLICATIONS I** **4.0 Credits**  
This course is the study of entry level clinical procedures in the hospital setting. *(Prerequisites: BIO 112 and/or BIO 211, RES 101, RES 121)*
- RES 152 CLINICAL APPLICATIONS II** **3.0 Credits**  
This course includes practice of respiratory care procedures in the hospital setting. Concepts and procedures are incorporated along with physician-led discussion on cardiorespiratory pathology. An entry-level assessment exam is administered. *(Prerequisites: RES 125, RES 131, RES 150)*
- RES 204 NEONATAL/PEDIATRIC CARE** **3.0 Credits**  
This course focuses on cardiopulmonary physiology, pathology, and management of the newborn and pediatric patient. *(Prerequisites: RES 110, RES 152)*
- RES 232 RESPIRATORY THERAPEUTICS** **2.0 Credits**  
This course is a study of specialty areas in respiratory care, including rehabilitation. Students are instructed in patient and family education procedures, pathophysiology of chronic lung disease, patient assessment and psychosocial aspects of dealing with chronic lung disease. *(Prerequisite: RES 152)*
- RES 235 RESPIRATORY DIAGNOSTICS** **4.0 Credits**  
This course is a study of diagnostic and therapeutic procedures. *(Prerequisite: RES 131)*
- RES 241 RESPIRATORY CARE TRANSITION** **1.0 Credit**  
This course provides a comprehensive review of respiratory care. A summative exit exam is administered. *(Prerequisites: RES 152, RES 244)*
- RES 242 ADVANCED RESPIRATORY CARE TRANSITION** **1.0 Credit**  
This course provides a comprehensive review of advanced respiratory care. Individual assignments on varied aspects of respiratory therapy are covered as well as a comprehensive review of theory and procedures. An exit exam is administered. *(Prerequisites: RES 235, RES 275)*
- RES 244 ADVANCED RESPIRATORY SKILLS I** **4.0 Credits**  
This course includes an in-depth study of mechanical ventilation and considerations for management of the critical care patient. *(Prerequisites: RES 125, RES 131)*
- RES 246 RESPIRATORY PHARMACOLOGY** **2.0 Credits**  
This course includes a study of pharmacologic agents used in cardiopulmonary care. An overview of general pharmacologic agents is covered, with particular emphasis on cardiopulmonary medications. *(Prerequisite: RES 255)*
- RES 275 ADVANCED CLINICAL PRACTICE** **5.0 Credits**  
This course includes clinical practice in advanced patient care procedures. *(Prerequisites: RES 204, RES 232, RES 255)*

- RES 277    ADVANCED CLINICAL PRACTICE II** **5.0 Credits**  
This course is the study of the clinical practice of advanced patient care procedures. *(Prerequisites: RES 235, RES 246, RES 275)*
- RTV 140    BASIC PHOTOGRAPHY** **3.0 Credits**  
This course covers the basics of the photographic process.
- SAC 101    BEST PRACTICES IN SCHOOL AGE AND YOUTH CARE SKILLS** **3.0 Credits**  
This course introduces basic best practices of school-age and youth care skills for practitioners in out-of-school care environments.
- SOC 101    INTRODUCTION TO SOCIOLOGY** **3.0 Credits**  
This course emphasizes the fundamental concepts and principles of sociology, including culture, socialization, interaction, social groups and stratification, effects of population growth, and technology in society and social institutions. *(Prerequisites: RDG 100, ENG 032)*
- SOC 205    SOCIAL PROBLEMS** **3.0 Credits**  
This course is a survey of current social problems in America, stressing the importance of social change and conflicts as they influence perceptions, definitions, etiology, and possible solutions. *(Prerequisites: ENG 032, RDG 100)*
- SOC 210    JUVENILE DELINQUENCY** **3.0 Credits**  
This course presents the nature, extent, and causes of juvenile delinquency behavior, including strategies used in the prevention, intervention, and control of deviant behavior. Juvenile courts and other institutions that are responsible for treatment and after care are also explored. *(Prerequisite: SOC 101 with a "C" or better)*
- SOC 220    SOCIOLOGY OF THE FAMILY** **3.0 Credits**  
This course includes an application of theory and research related to family behaviors, roles and values, with emphasis on understanding family problems. It includes both historical and contemporary perspectives, and provides a cross-cultural examination of intimate relationships, patterns of marriage, and family forms. Topics also include sex and gender, love, partnering, reproduction, elderly care, divorce and separation, and family policy. *(Prerequisites: RDG 100, ENG 032)*
- SOL 101    SOLAR BUILDING FUNDAMENTALS** **3.0 Credits**  
This course is an introduction to the building materials, fundamental building techniques, and building systems specific to the solar industry. *(Prerequisite: RDG 100)*
- SOL 120    BASIC SOLAR ENERGY TECHNOLOGY** **3.0 Credits**  
This course is a study of the fundamental concepts of solar energy and systems, site assessment, electrical and thermal energy storage, return on investment, and licensing requirements. *(Prerequisites: EEM 117, EEM 118)*
- SOL 201    SOLAR PHOTOVOLTAIC SYSTEMS** **4.0 Credits**  
This course studies the installation and connections of solar photovoltaic (PV) components in residential or light commercial field applications. *(Prerequisites: EEM 117, EEM 118)*

- SPA 101 ELEMENTARY SPANISH I 4.0 Credits**  
This course is a study of the four basic language skills: listening, speaking, reading and writing, including an introduction to the Hispanic cultures. *(Prerequisites: ENG 100 and have never studied Spanish or placed by examination into SPA 101)*
- SPA 102 ELEMENTARY SPANISH II 4.0 Credits**  
This course continues development of the basic language skills and the study of the Hispanic cultures. It stresses the grammar and vocabulary necessary for fundamental communications skills. *(Prerequisite: SPA 101 with a "C" or better or have placed by examination into SPA 102)*
- SPA 122 BASIC PROFICIENCY IN SPANISH 3.0 Credits**  
This course covers the practice and further development of essential listening, reading, speaking and writing skills. *(Prerequisite: SPA 102 with a "C" or better or have placed by examination into SPA 122)*
- SPC 205 PUBLIC SPEAKING 3.0 Credits**  
This course is an introduction to the principles of public speaking with application of speaking skills. Students entering this course must be able to communicate clearly with American speakers of English. *(Prerequisites: RDG 100, ENG 100, or equivalent test score)*
- SPC 208 INTERCULTURAL COMMUNICATION 3.0 Credits**  
This course is an introduction to the theory and practice of "difference-based" communication--the study of face-to-face communication where significant cultural differences exist in values, perception, and verbal and nonverbal behavior. *(Prerequisites: RDG 100, ENG 100, or equivalent test score)*
- SPC 209 INTERPERSONAL COMMUNICATION 3.0 Credits**  
This course is an introduction to the principles of interpersonal communication with emphasis on interpersonal theory as applied to personal and professional relationships. Students will learn to observe and analyze how these principles operate in daily interaction with others. *(Prerequisites: RDG 100, ENG 100, or equivalent test score)*
- SPC 210 ORAL INTERPRETATION 3.0 Credits**  
This course presents the principles and practices in oral interpretation of literary works. *(Prerequisites: RDG 100, ENG 100, or equivalent test score)*
- SPC 215 VOICE AND DICTION 3.0 Credits**  
This course includes the analysis, evaluation, and improvement of speech through a study of the anatomy of human speech production. *(Prerequisites: RDG 100, ENG 032, or equivalent test score)*
- SUR 101 INTRODUCTION TO SURGICAL TECHNOLOGY 5.0 Credits**  
This course includes a study of the surgical environment, team concepts, aseptic technique, hospital organization, basic instrumentation and supplies, sterilization, principles of infection control and wound healing. *(Prerequisite: Acceptance into Surgical program or approval of program director)*

- SUR 102 APPLIED SURGICAL TECHNOLOGY 5.0 Credits**  
 This course covers the principles and application of aseptic technique, the perioperative role, and medical/legal aspects. *(Prerequisites: AHS 127, SUR 101, SUR 103)*  
*(Corequisites: SUR 104, SUR 110)*
- SUR 103 SURGICAL PROCEDURES I 4.0 Credits**  
 This course is a study of a system to system approach to surgical procedures and relates regional anatomy, pathology, specialty equipment, and team responsibility. Patient safety, medical/legal aspects, and drugs used in surgery are emphasized. *(Prerequisite: Acceptance into Surgical program)*
- SUR 104 SURGICAL PROCEDURES II 4.0 Credits**  
 This course is a study of the various specialties of surgical procedures. *(Prerequisites: SUR 101, SUR 103)* *(Corequisites: SUR 102, SUR 110)*
- SUR 110 INTRODUCTION TO SURGICAL PRACTICUM 5.0 Credits**  
 This course is an introduction to the application of surgical technique by assisting in the perioperative roles in various clinical affiliations. *(Prerequisites: SUR 101, SUR 103)*  
*(Corequisites: SUR 102, SUR 104)*
- SUR 114 SURGICAL SPECIALITY PRACTICUM 7.0 Credits**  
 This course includes the correlation of the principles and theories of specialized surgical procedures with clinical performance in affiliated hospitals. *(Prerequisites: SUR 104, SUR 110)* *(Corequisite: SUR 120)*
- SUR 120 SURGICAL SEMINAR 2.0 Credits**  
 This course includes the comprehensive correlation of theory and practice in the perioperative role. *(Prerequisites: SUR 102, SUR 104, SUR 110 or permission of program director)* *(Corequisite: SUR 113)*
- SUR 123 STERILE PROCESSING TECHNOLOGY 3.0 Credits**  
 This course provides a detailed study of the preparation and processing procedures of surgical instrumentation and equipment. *(Prerequisites: BIO110, AHS102)*
- SUR 125 STERILE PROCESSING PRACTICUM 5.0 Credits**  
 This course presents the applications of sterile processing theory in the clinical setting. *(Prerequisite: SUR 123)*
- TEL 101 FUNDAMENTALS OF TELECOMMUNICATIONS 2.0 Credits**  
 This course is a study of the telecommunications network, including an overview of network topologies, switching operations, local loop operations and telephone circuit operations. *(Prerequisite: MAT 100 or MAT 152)*
- TEL 110 TELECOMMUNICATIONS NETWORK PLANNING 3.0 Credits**  
 This course is a study of the telecommunications planning process. Topics include switching hierarchies, local loop and interoffice network design using the long range outside plant plan concept, F1/F2 concepts and distribution area design. *(Prerequisite: TEL 101)*

**TEL 203 FUNDAMENTALS OF WIRELESS COMMUNICATIONS 3.0 Credits**

This course is a study of current wireless technologies, digital, analog and PCS, as well as future directions. *(Prerequisite: IST 200)*

**TEL 240 FIBER OPTICS THEORY 2.0 Credits**

This course is a study of the basic theory of fiber optics transmission. Topics include o/e conversions, multiplexer design and SONET standards. *(Prerequisite: TEL 101)*

**TEL 250 TELECOMMUNICATIONS STRUCTURE DESIGN 2.0 Credits**

This course is a study of various structures used in the telecommunications outside plant network. *(Prerequisite: TEL 101)*

**THE 101 INTRODUCTION TO THEATRE 3.0 Credits**

This course includes the appreciation and analysis of theatrical literature, history, and production. *(Prerequisite: RDG 100)*

**THE 105 FUNDAMENTALS OF ACTING 3.0 Credits**

This course includes the study of dramatic performance techniques, including improvisations and interpretation of characters. *(Prerequisites: RDG 100, ENG 100 or equivalent test score)*

**THE 125 ACTING FOR THE CAMERA 3.0 Credits**

This course is an applied study of acting techniques and skills used in television and video performance. It is intended for students who have a strong professional interest in acting for television, industrial video, and film. *(Prerequisite: THE 105)*

**THE 220 THEATRE LABORATORY I 1.0 Credit**

This course is supervised participation in theatrical productions. *(Prerequisite: RDG 100)*

**THE 221 THEATRE LABORATORY II 1.0 Credit**

This course is supervised participation in theatrical productions. *(Prerequisite: RDG 100)*

**THE 222 THEATRE LABORATORY III 1.0 Credit**

This course is the third in a sequence of laboratory courses offering supervised participation in a theatrical production. Students will receive practical experience in various areas tailored specifically to the needs of the assigned production. *(Prerequisite: RDG 100)*

**THE 253 STAGECRAFT 3.0 Credits**

This course is an applied study of technical theatre, including the fundamentals of scene design, set construction, painting, lighting, base electronics, properties, fly systems, drafting techniques, and back stage organization. *(Prerequisites: ENG 100, RDG 100)*

**WLD 102 INTRODUCTION TO WELDING 2.0 Credits**

This course covers the principles of welding, cutting, and basic procedures for safety in using welding equipment. *(Prerequisites: ENG 100, MAT 152, RDG 100)*

- WLD 103 PRINT READING I** **1.0 Credit**  
This is a basic course which includes the fundamentals of print reading, the meaning of lines, views, dimensions, notes, specifications, and structural shapes. Welding symbols and assembly drawings as used in fabrication work are also covered. *(Prerequisites: ENG 100, MAT 152, RDG 100)*
- WLD 104 GAS WELDING AND CUTTING** **2.0 Credits**  
This course covers gas welding, brazing, soldering, and cutting of metals. *(Prerequisites: ENG 100, MAT 152, RDG 100)*
- WLD 105 PRINT READING II** **1.0 Credit**  
This course includes print reading, including welding symbols and their applications to pipe fabrication. Basic sketching of piping symbols, single line and double line pipe drawings, material estimating, template layout and how templates are used in pipe layouts are included. *(Prerequisites: WLD 102, WLD 103, WLD 104, WLD 111, WLD 140)*
- WLD 109 GAS METAL ARC WELDING 2** **3.0 Credits**  
This course covers all position welding and advanced techniques for welding ferrous and non-ferrous metals. *(Prerequisites: WLD 111, WLD 202, WLD 102)*
- WLD 110 WELDING SAFETY AND HEALTH** **1.0 Credit**  
This course is an introduction to safety and health hazards associated with welding and related processes. *(Prerequisites: WLD 111, WLD 202, WLD 102)*
- WLD 111 ARC WELDING I** **4.0 Credits**  
This course covers the safety, equipment, and skills used in the shielded metal arc welding process. Fillet welds are made to visual criteria in several positions. *(Prerequisites: ENG 100, MAT 152, RDG 100)*
- WLD 113 ARC WELDING II** **4.0 Credits**  
This course is a study of arc welding of ferrous and/or non-ferrous metals. *(Prerequisites: WLD 102, WLD 103, WLD 104, WLD 111, WLD 140)*
- WLD 115 ARC WELDING III** **4.0 Credits**  
This course covers the techniques used in preparation for structural plate testing according to appropriate standards. *(Prerequisites: WLD 111, WLD 202, WLD 102)*
- WLD 120 FLUX CORED ARC WELDING I** **4.0 Credits**  
This course covers the equipment set-up and fundamental techniques for flux cored arc welding. *(Prerequisites: WLD 109, WLD 115, WLD 103, WLD 110)*
- WLD 134 INERT GAS WELDING NON-FERROUS** **3.0 Credits**  
This course covers fundamental techniques for welding non-ferrous metals. *(Prerequisites: WLD 102, WLD 103, WLD 104, WLD 111, WLD 140)*
- WLD 136 ADVANCED INERT GAS WELDING** **2.0 Credits**  
This course covers the techniques for all positions of welding ferrous and non-ferrous metals. *(Prerequisites: WLD 105, WLD 113, WLD 134, WLD 154)*

**WLD 140 WELD TESTING****1.0 Credit**

This is an introductory course in destructive and non-destructive testing of welded joints. *(Prerequisites: ENG 100, MAT 152, RDG 100)*

**WLD 142 MAINTENANCE WELDING****3.0 Credits**

This course is a study of welding processes as they are used in maintenance. Students will learn weld repair, crack prevention/repair, and other techniques necessary for repairing damaged and/or poorly fit components. *(Prerequisites: WLD 154, WLD 136)*

**WLD 154 PIPE FITTING AND WELDING****4.0 Credits**

This is a basic course in fitting and welding pipe joints, either ferrous or non-ferrous, using standard processes. *(Prerequisites: WLD 102, WLD 103, WLD 104, WLD 111, WLD 140)*

**WLD 160 FABRICATION WELDING****3.0 Credits**

This course covers the layout and fabrication procedures as they pertain to sheet metal and structural steel shapes. The course will also include shop safety and hand and power tools. *(Prerequisites: WLD 228; WLD 142; WLD 105; WLD 140)*

**WLD 170 QUALIFICATION WELDING****4.0 Credits**

This course covers the procedures and practices used in taking welder qualification tests. *(Prerequisites: WLD 102, WLD 103, WLD 104, WLD 111, WLD 140)*

**WLD 202 CUTTING FUNDAMENTALS****2.0 Credits**

This course covers cutting processes to include: Oxy-Fuel, CAC-A, Plasma, and Mechanical. *(Prerequisites: RDG 100)*

**WLD 228 INERT GAS PIPE WELDING I****4.0 Credits**

This course covers the techniques used in gas tungsten arc welding of groove welds on ferrous pipe. *(Prerequisites: WLD 154, WLD 136)*

# Administration and Faculty



Midlands Technical College places a primary value on helping students succeed. All employees of the college perform services for students daily, and the college is proud of each employee. While we wish this catalog could list all employees, the purpose of the following list of names is to record the academic credentials of those faculty and administrators who hold primary responsibility for teaching and delivering other programs and services to students. Each entry contains the year when the employee began service with the college and their academic credentials, professional certifications and licensures.

## Executive Council and President's Staff

**Rhames, Ronald L.** (1990), President; A.A., Midlands Technical College; B.S., Benedict College; M.S., Central Michigan University; D.B.A., Nova Southeastern University

**Bates, Starnell K.** (1987), Vice President for Institutional Support; B.F.A., M.Ed., University of South Carolina

**Bias, Joseph P.** (2019), General Counsel, B.A., Wofford College; J.D. University of South Carolina School of Law

**Boatwright, Kimberly S.** (1995), Executive Assistant to the President, University of South Carolina

**Goebeler, Stefanie L.** (2014), Assistant Vice President for Marketing Communications; B.A., University of South Carolina; M.A., Columbia College

**Holloway, Mary H.** (1982), Vice President for Student Development Services; A.S., Piedmont Technical College; B.S., Lander University; M.Ed., Clemson University; Ph.D., University of South Carolina; National Certified Counselor, Licensed Professional Counselor, Graduate Certificate in Higher Education Leadership, University of South Carolina

**Kirk, Barrie B.** (1995), Provost; B.A., M.Ed., Ed.D., University of South Carolina

**McKinney, Nancy L.** (2018), Associate Vice President for Philanthropy and CEO, Midlands Technical College Foundation; B.A., Iowa State University; MPA, Drake University

**Walker, Debbie M.** (1997), Vice President for Business Affairs; B.S., University of South Carolina; MBA, Southern Wesleyan University; CGFO, Government Finance Officers Association of South Carolina/University of South Carolina

**Whipple, Charlton L.** (2016), Executive Director for Economic Development, Enterprise Campus Authority; B.S., South Carolina State University; M.S.E.D., The University of Southern Mississippi; Graduate Certificate in Banking, The Graduate School of Banking of the South at Louisiana State University

## Faculty Emeriti

**Frick, Theodore M.** (1966-1999), Instructor, Heating, Ventilation, Air Conditioning and Refrigeration Technology; Diploma, South Carolina Area Trade School; B.A., University of South Carolina (1999).

**Hanks, Martha H.** (1989-2018), Associate Vice President of Career Programs; B.S., M.A.T. University of South Carolina; D.D.S.; University of North Carolina; Licensed Dentist. (1980)

**Holland, Reid A.** (1987-2015), Instructor, Humanities; B.A., Northwestern State College; M.A., Ph.D., Oklahoma State University (2021).

**Lowry, Beverly F.** (1973-1992), Instructor, Developmental Studies English; B.A., M.A., University of New Hampshire (1994).

**Luce, Dianne** (1984-2007), Instructor, English; B.S., University of Minnesota, Duluth; M.A., University of Chicago; Ph.D., University of South Carolina (2013).

**Sallman, John B.** (1964-1989), Instructor, Mechanical Engineering Technology; B.S.M.E., University of South Carolina (1989).

**Thomas, Darlene J.** (1974-2005), Instructor, Developmental Studies Reading; B.A., M.Ed., University of South Carolina (1996).

**Stuart, Frances C.** (1966-1984), Librarian/Director, Library, B.A., University of South Carolina; BLS, Peabody, MLS, Vanderbilt University (2003).

**VanSeters, Virginia** (1969-1984), Instructor, Developmental Studies Mathematics; B.A., Columbia College; M.Ed., University of South Carolina (1997).

## Faculty

**Abercrombie, Wesley C.** (2000), Program Director and Instructor, Sociology, B.A., M.C.J., Ph.D., University of South Carolina.

**Albritton, Erica S.** (2020), Program Director and Instructor Medical Assisting, A D Medical Assisting. B S Healthcare Management South University, MHA Webster

**Alger, Errol R.** (2018) Instructor, Humanities, Art, M.Ed., University of North Carolina.

**Alva, Luis H.** (2018), Instructor, Mechanical Engineering Technology and Engineering Transfer; B.S., National University of Trujillo; M.S., University of Puerto Rico; Ph.D., University of South Carolina

**Alvarado, Glenda** (2020), Instructor, Marketing; B.A., Angelo State University; M.A., Ph.D., Texas Tech University.

**Amick, Stacey C.** (1993), Instructor, Nursing; B.S.N., M.N., C.S. ACNP, University of South Carolina; Registered Nurse.

**Antley, Candyce F.** (1988), Instructor, Nursing; B.S.N., M.N., University of South Carolina; Registered Nurse; Graduate Certificate in Higher Education Leadership, University of South Carolina.

**Aull, Jennifer W.** (2015), Instructor, Mathematics; B.S., Winthrop University, M.Ed., Cambridge College; Ed.S., Nova Southeastern University.

**Bailey, Richard S.** (1991), Instructor, Mathematics; B.S., University of Wisconsin at Madison; M.A.T., University of South Carolina.

**Baker, Laura** (1998), Associate Librarian; B.A., M.L.I.S., University of South Carolina.

**Barton, Richard R.** (2017), Instructor, Information Systems Technology; B.S., University of South Carolina; M.S., University of Illinois.

**Basham, Joyce** (1994), Program Director and Instructor, Nursing; B.S.N., M.N., University of South Carolina; Registered Nurse.

**Beard, Holly** (2006), Instructor, Psychology; B.A., University of North Texas; M.S., Clemson University.

**Beaty, Karin** (1993), Instructor, Mathematics; B.S., North Carolina State University; M.A.T., Winthrop University; C.A.G.S. Curriculum and Instruction in Mathematics, Virginia Polytechnic Institute and State University.

**Bellamy-Coletrain, Renee** (1999), Program Director and Instructor, Human Services; B.S., Lehman College; M.S.W., University of South Carolina. Graduate Certificate in Higher Education Leadership, University of South Carolina.

**Belton, Elaine M.** (2016), Instructor, Psychology; B.A., University of South Carolina; Ph.D., University of South Carolina.

**Bennett, Patrick** (2015), Instructor, Humanities, Speech; B.A., Georgia Southern University; M.A., Southern Illinois University Carbondale.

**Blackberg, Mark E.** (1999), Instructor, Machine Tool Technology; Associate Degree in Industrial Technology in Machine Tool, Midlands Technical College; Journeyman Toolmaker.

**Bobo, Valli** (2005), Instructor, Respiratory Care; B.S.R.T., Respiratory Therapy, Medical University of South Carolina; Registered Respiratory Therapist-Adult Critical Care Specialist, R.R.T.-A.C.C.S.; Registered Respiratory Therapist, R.R.T.; Respiratory Care Practitioner, R.C.P.

**Bothur, Eric C.** (2010), Instructor, Information Systems Technology; B.S., M.S., Rutgers University; M.Div., D.Min., Columbia International University.

**Bowers, Dana C.** (2012), Instructor, Nursing; B.S.N., Excelsior College; M.S.N., University of Phoenix; Registered Nurse.

**Bradwell, Terry L.** (1996), Instructor, Heating, Ventilation, Air Conditioning Technology. A.I.T., Midlands Technical College; B.S., Baptist College.

**Brock, MaryAnne B.** (2017), Instructor, English; B.A., Furman University; M.A., University of North Carolina at Wilmington.

**Brown, Adrian R.** (2014), Instructor, Information Systems Technology; B.S., Limestone College; MBA, Webster University.

**Buchanan, Christina L.** (1999), Instructor, Architecture Engineering Technology; B.S., M. Arch, Clemson University.

**Burger, Evelyn** (2010), Associate Librarian; B.A., Gordon College; M.L.I.S., Simmons College.

**Burwick, Wanda** (2009), Department Chair and Instructor, Information Systems Technology; B.A., Columbia College; M.B.A., Webster University; PMP, Project Management Institute.

**Campbell, Elnora** (2015), Program Director and Instructor, Information Systems Technology, A.S. Trident Technical College; B.S., Southern Wesleyan University; M.B.A., Strayer University; M.A. Webster University; C.A.P. Certification, IAAP.

**Carr, Diane** (1993), Vice Provost for Academic Affairs; English; B.A., M.A., Ph.D., University of South Carolina.

**Carraway, Shawn** (2001), Associate Librarian; B.S., M.L.I.S., University of South Carolina.

**Carter, Perry** (1997), Instructor, Biology; B.S., University of Alabama; Ph.D., University of South Carolina School of Medicine.

**Casper, Drew H.** (2015), Instructor, Psychology; B.A., Presbyterian College; M.S., Georgia Southern University.

**Castillo, Jessica D.** (2018), Instructor, English; B.A., M.A., University of South Carolina.

**Castro, Sarah K.** (2016), Instructor, English; B.A., University of Notre Dame; M.F.A., Naropa University; M.L.I.S., University of South Carolina.

**Chaplin, Doris V.** (1985), Instructor, Nursing; B.S.N., M.N., University of South Carolina; Registered Nurse.

**Childress, Kristyn J.** (2021) Instructor, Nursing; B.S.N., University of Saskatchewan; M.S.N., Walden University.

**Coates, Mandi** (2017), Instructor, Nursing; B.S.N., University of South Carolina, M.S.N., Grand Canyon University; Registered Nurse.

**Colley, Gregory L.** (2019), Instructor, Mathematics; M.E., Auburn University; M.M., University of South Carolina.

**Compton, Daniel Scott** (2014), Instructor, English; B.A, College of Charleston; M.A., English, The Citadel and University of Charleston; M.A.T., The Citadel; National Board Certified, AYA/English Language Arts.

**Converse, Bruce** (2009), Instructor, Humanities, Speech; B.S., Southern Illinois University; M.A., Northeastern Illinois University.

**Cook, Tracy** (2014) Director of Clinical Education and Instructor, Respiratory Care: A.S., Midlands Technical College; B.A., Columbia College; M.S., Northeastern University, Registered Respiratory Therapist, R.R.T; Respiratory Care Practitioner, R.C.P.

**Corning, Lisa** (2018), Program Director and Instructor, Early Childhood Development, B.S.; Bowling Green State University; M.S.; East Carolina University; Certified Master Trainer, South Carolina Endeavors; SC Teacher Certification in Early Childhood.

**Cornwell, Charlene L** (2018), Instructor, Business Education/Administration; B.S., South Carolina State University; M.A, Computer Resources and Information Management,

Webster University; IT Certifications, PMI-PMP, IIBA-CBAP, CSM, ITIL, PMI-ACP, IIBA-ECBA, CompTIA Project+.

**Cortese, Vincent J.** (2012), Instructor, English; B.A., University of California, Berkeley, M.A., San Jose State University.

**Cox, C. Brad** (2001), Instructor, Management; B.S., Jacksonville State University; M.B.A., University of South Carolina.

**Craig, Lee** (2012), Instructor, Physics; B.S., University of North Carolina; M.S. Clemson University.

**Croft, Joseph B.** (1997), Instructor, Commercial Graphics Technology; B.S., Clemson University; Graduate Certificate in Higher Education Leadership, University of South Carolina.

**Culler, Douglas L.** (2006), Instructor, Mathematics; B.S., Presbyterian College; M.Ed., South Carolina State University.

**Cusaac, Terrance L.** (2017), Instructor, Management; B.S., Benedict College; M.P.A., Troy State University; Ph.D., Capella University.

**Danzler, Russ** (2016) Instructor, Academic and Clinical, Radiologic Technology; B.S., Midlands Technical College. Registered Radiographer, A.R.R.T., and credentialed In Computerized Tomography.

**Demick, Jared** (2016), Instructor, English; B.A., University of Massachusetts, Amherst; M.A., Ph.D., University of Connecticut, Storrs.

**Dempsey, Georgina M.** (2016), Librarian; B.S., Winthrop College; B.A., Benedict College; M.A., Columbia College; M.L.I.S., University of South Carolina.

**Desautels, Rhonda L.** (2013), Instructor, Mathematics; B.S., Kansas State University; M.S., University of Oklahoma; Ph.D., Ohio State University.

**Diep, Huyen** (2012), Associate Librarian; B.A., M.L.I.S., University of South Carolina.

**Dixon, Megan R.** (2014), Instructor, Nursing; B.S.N., University of South Carolina; M.S.N., University of Phoenix; Registered Nurse.

**Downing, Timothy (T.J.)** (2018), Instructor, Physics, B.A. Clemson University, M.A. University of California Riverside.

**Doyle, Candace** (2008), Dean, School of Health Care; Certificate, Perfusion Technology, Shadyside Hospital School of Perfusion Technology; B.S., University of Pittsburgh; M.S.Ed, Certificate in Health Care Ethics, Duquesne University. Certified Cardiovascular Perfusionist Emeritus C.C.P. Emeritus. American Board of Cardiovascular Perfusion.

**Duncan, Rhonda** (2006), Instructor, Mathematics; B.S., M.A.T., University of South Carolina.

**Eargle, Michelle S.** (2015), Instructor, Human Services; B.S., University of South Carolina; M.S., Springfield College School of Human Services, Human Services-Board Certified Practitioner.

**Earn, Patricia** (2003), Instructor, Nursing; B.S.N., Medical University of South Carolina; M.S.N., University of South Carolina; Registered Nurse; Graduate Certificate in Nursing Education, University of North Carolina, Charlotte; Certified Pediatric Nurse Practitioner, Certified Nurse Educator.

**Ellington, Melissa** (2016), Instructor, English; B.A. and M.A.T., University of South Carolina; Ph.D., New York University.

**Evans, Elaine G.** (2008), Program Director and Instructor, Expanded Duty Dental Assisting; B.H.S., Medical University of South Carolina; Certified Dental Assistant (CDA).

**Fadel, Sherry L.** (2015), Academic Coordinator of Clinical Education and Instructor, Physical Therapist Assistant; B.A., Wheaton College; M.S., Duke University; Physical Therapist, PT.

**Ferguson, Heléna L.** (2018), Instructor, Anthropology; B.A., M.A., University of South Carolina; Museum Management Certificate, University of South Carolina.

**Fins, Ilene** (2015), Instructor, Humanities, Theatre; B.A., Clemson; M.F.A., University of North Carolina, Greensboro.

**Flynn, Brian** (2014), Instructor, English; B.A. University of North Carolina, Wilmington; M.A., University of North Carolina, Wilmington; M.A., East Carolina University.

**Franken, Alina S.** (2016), Program Coordinator and Instructor, Electronics Engineering Technology and Engineering Transfer; B.S., M.E., Ph.D., University of South Carolina.

**Freeman, John H.** (2021), Instructor, Industrial Electricity; A.S., Midlands Technical College.

**Frost, Donald** (2019) Program Director and Instructor, Mechatronics Technology; AOT, Tri-County Technical College; Journeyman's card in Machine Tool Technology.

**Fulwood, Caleb** (2014), Instructor, Welding Technology; A.A.S., Midlands Technical College; AWS Certified Welding Inspector (CWI); AWS Certified Welding Educator (CWE); NCCER Core Curriculum Certified in Welding.

**Galloway, Debra** (2017), Program Director and Instructor, Paralegal Studies; B.A., J.D. University of South Carolina School of Law.

**Gantt, (Jonathan) Wes** (2016), Instructor, Humanities, History; B.A., M.A. University of North Carolina, Wilmington; Ph.D., University of South Carolina.

**Gasparik, Rob** (2015), Instructor, Computer and Information Technology; B.S., Western Reserve University; M.B.A., John Carroll University; M.S., Emporia State University. IT certifications: CISCO CCIE, CCNP, CCDP, CCNA, CCDA, & CompTIA A+, Network+, Security+, ITF+, Cloud Essentials, Server+, CASP+, Cloud+, PenTest+, CySA+, Linux+.

**Gaston, Benjamin** (2013), Dean, School of Science Information Technology, Engineering and Mathematics; B.S, Clemson University; M.E., University of South Carolina; Registered Professional Engineer.

**Gillespie, Ellyn S.** (1996), Instructor, Mathematics; B.S., West Virginia Institute of Technology; M.A.T., The Citadel.

**Gilliam, Doris** (2017), Instructor, Humanities, Spanish; B.A., Winthrop University; M.A., University of Florida; Ph.D., Florida State University.

**Gilmer, Robert** (2014), Department Chair, Humanities, and Instructor, History; B.A., University of North Carolina – Asheville; M.A., Western Carolina University; Ph.D., University of Minnesota.

**Goff, Eric E.** (2020), Instructor, Biology, University of South Carolina; B.S., John Hopkins University, M.S., University of South Carolina, Ph.D.

**Goodreau, Meredythe R.** (2020), Instructor, Nursing; B.S.N., University of Phoenix; M.S.N., University of Phoenix; Registered Nurse.

**Grabbatin, Brian C.** (2013), Instructor, Geography; B.S., M.S., College of Charleston; Ph.D., University of Kentucky.

**Grass, Timothy B.** (2016), Instructor, Automotive Technology; A.I.T., Midlands Technical College; ASE Certified Master Technician, Toyota Master Technician.

**Graves, Jessica** (2011), Instructor, English; B.A., Columbia College; M.A., Winthrop University.

**Green, Marilyn A.** (2012), Associate Librarian; B.A., Talladega College, M.L.I.S., University of South Carolina.

**Grego, Rhonda** (2006), Dean, School of English and Humanities, English; B.A., College of Charleston; M.A., Ph.D., Pennsylvania State University.

**Griffin, Angela M.** (2013), Program Director and Instructor, Psychology; B.A., University of North Carolina at Chapel Hill; M.A., Ph.D., The University of Texas at Austin.

**Hagar, Janel** (2015), Instructor, Biology; B.S., M.S., Grand Valley State University; Ph.D., University of South Carolina.

**Hames, William R., Jr.** (1978), Instructor, Mathematics; A.S., Midlands Technical College; B.S., South Carolina State University; M.Ed., University of South Carolina.

**Hardy, Jonathan A.** (2017), Automotive Interim Program Director and Instructor; B.S., Pennsylvania College of Technology; ASE Master Certification.

**Harmon, Ann** (1981), Instructor, Nursing; B.S.N., University of South Carolina; M.S.N./ FNP, Medical College of Georgia; PNP University of Virginia; Retired Lt. Colonel SCANG; Registered Nurse.

**Hausser, Amy** (2003), Instructor, English; B.A., Duquesne University; M.A., University of South Carolina.

**Haynes, Keith** (2014), Instructor, Information Systems Technology; B.S., Hofstra University; M.S., Golden Gate University; M.S., Naval Postgraduate School; Ph.D., Florida State University; M.S., University of South Carolina; Graduate Certificate, University of Maryland University College.

**Henderson, Joseph C.** (2017), Program Coordinator and Instructor; Heating, Ventilation, Air Conditioning and Refrigeration Technology; A.A.S., Midlands Technical College.

**Hendrix, Cayce** (2013), Instructor, Respiratory Care; A.S., Midlands Technical College; B.A., Columbia College; M.A., Columbia College, Registered Respiratory Therapist, R.R.T.; Respiratory Care Practitioner, R.C.P.; Neonatal/Pediatric Specialist, N.P.S., Certified Asthma Educator, AE-C.

**Hendrix, Mary Helen** (2016), Director, Center for Teaching Excellence,

**Higgins, Sean D.** (2006), Program Coordinator and Instructor, Civil Engineering Technology and Engineering Transfer; B.S., University of Dayton; M.S., University of South Carolina.

**Hook, Stacey** (2004), Instructor, Surgical Technology Program; Diploma, Midlands Technical College; Certified Surgical Technologist, C.S.T.; A.O.T., Midlands Technical College.

**Hopkins, Jeffrey L.** (1985), Instructor, Physics; B.S., P.C.S., M.S., University of Georgia.

**Horn, Kelly** (1999), Instructor, Nursing; B.S.N., University of Maryland; M.S.N., Clarkson College; Registered Nurse-Board Certified, Gerontological Nursing.

**Horton, Michael A.** (2017), Instructor, English; B.A., Butler University; M.A., University of Missouri.

**Huff, Erica** (2019), Associate Librarian; B.A., University of South Carolina; M.S.L.S, University of North Texas.

**Hunt, Lee** (2015), Program Director and Instructor, Business; B.F.A., M.B.A., University of Tennessee.

**Jackson, Eddie R.** (1988), Program Director and Instructor, Respiratory Care; A.S., Midlands Technical College; B.A., University of South Carolina; Graduate Certificate in Higher Education Leadership, University of South Carolina; M.H.A., Webster University; Registered Respiratory Therapist, R.R.T.; Respiratory Care Practitioner, R.C.P.; Neonatal/Pediatric Specialist, N.P.S.

**Jake, Janice L.** (1991), Department Chair and Instructor, English; B.A., M.A., Ph.D., University of Illinois at Champaign-Urbana.

**Jamerson, Sharonda, M.** (2016), Instructor, Nursing; A.D.N., Piedmont Technical College; B.S.N., M.S.N., Chamberlain College; Registered Nurse.

**Johnson, Natasha A.** (2017), Director Simulation Lab and Instructor, Allied Health Sciences, B.S. HIM; Western Governors University; A.A.S., Midlands Technical College; Registered Health Information Technician (RHIT).

**Jones, Darryl B.** (2018). Instructor, Civil Engineering Technology and Engineering Transfer; B.S., M.S., Clemson University.

**Joseph Holter, Christina M.** (2018), Department Chair and Instructor, Engineering Technologies and Engineering Transfer; B.S., Muhlenberg College; M.S., University of South Carolina.

**Kea, Luanne N.** (2015), Instructor, Psychology; B.A., Columbia College; M.A., The Citadel; Licensed Professional Counselor.

**Kemfort, Rebecca J.** (2013), Department Chair and Instructor, Nursing; A.D.N., Midlands Technical College; M.S.N., Charleston Southern University; Registered Nurse.

**Kendall, Kristen W.** (2021), Instructor, Nursing; B.S.N., Illinois Wesleyan University; M.S.N., Western Governors University; Registered Nurse.

**Kenison, Dale C.** (2015), Instructor, Biology; B.S., Biology, Cornell University; M.S., Ph.D., Texas A&M University.

**Kim, Daniel** (2014), Instructor, Accounting; B.S., M.Acc., J.D., University of South Carolina.

**Kimel, T. J.** (2017), Instructor, Political Science; B.A., North Carolina State University; M.A., Ph. D., University of South Carolina.

**Knight, Thomas** (2008), Instructor, Industrial Trades; Associate in Electronics Engineering Technology, Midlands Technical College.

**Kreiner, Mauren H.** (2006), Program Director Nuclear Medicine Technology and Computed Tomography; Nuclear Medicine Instructor; C.H.S., Midlands Technical College; B.S., University of South Carolina; Masters in Health Science Education with a concentration in Higher Education, Nova Southeastern University; Registered Nuclear Medicine Technologist, A.R.R.T., Certified Nuclear Medicine Technologist, N.M.T.C.B.

**Kronk, Janie** (2020), Program Director, Architectural Engineering Technology; B.S., Architecture, The Ohio State University; M.Arch, Clemson University.

**Lambdin, Robert T.** (2005), Instructor, English; B.S., M.A., Old Dominion University; Ph.D., University of South Florida.

**Lari, Mohsen B.** (2003), Instructor, Electronics Engineering Technology and Engineering Transfer; B.S., M.S., University of South Carolina.

**Lass, Susan H.** (2013), Instructor, Mathematics; B.A., M.Ed., Clemson University.

**Lee, M. Dwayne** (2005), Program Director and Instructor, Criminal Justice; B.A., M.C.J., University of South Carolina.

**Lema, Michael** (1996), Instructor, Biology; B.A., Trinity College; M.S., University of Pittsburgh; Ph.D., University of South Carolina School of Medicine.

**Lester, Matthew** (2013), Instructor, Industrial Trades; Associate in Occupational Technology with a major in General Technology with a concentration in Industrial Mechanics, Tri-County Technical College.

**Lignons, Alexander** (2017), Instructor, Management; B.A., University of South Carolina; M.B.A., North Greenville University; M.C.M., Anderson University.

**Long, John R.** (1971), Instructor, Mathematics; B.S., M.A., Appalachian State University.

**Lopez-de-Victoria, GERALYNE** (2003), Department Chair, Science and Instructor, Biology; B.S., M.S., University Puerto Rico; Ph.D., University of South Carolina.

**Mack, David A.** (2013), Instructor, English; A.S., Rutledge College; B.S., Benedict College; M.A.T., University of South Carolina; M.Ed., Cambridge College.

**Martin, Bruce T.** (1998), Program Director and Instructor, Information Systems Technology; B.A, Earlham College; M.A., University of Illinois; Master of Computer Science, University of Illinois at Champaign - Urbana; Ph.D., University of South Carolina.

**Martínez-Vidal, Elena** (2000), Instructor, Speech and Theatre; B.A., Dickinson College; M.F.A., Certificate in Higher Education Leadership, University of South Carolina.

**Massey, Millie** (1993), Program Director and Instructor, Radiologic Technology; Certificate, Providence Hospital, Southfield, Michigan; B.A., Siena Heights College; M.Ed., University of South Carolina; Registered Radiographer, A.R.R.T. and Cardiovascular Radiology.

**Mays, Florence** (2001), Director of Library; B.S., M.L.I.S., University of South Carolina.

**McClure, Carl** (2017), Instructor, Nursing; A.D.N., Gardner Webb College; B.S.N., M.S.N., University of South Carolina; Registered Nurse.

**McCollum, Benji M.** (2020), Program Director and Instructor, Paramedic Program; A.D.N., Excelsior College; B.S., University of South Carolina; Registered Nurse; Nationally Registered Paramedic.

**McCoy, Tracy T.** (2012), Instructor, Mathematics; A.S., Midlands Technical College; B.S., M.S., University of South Carolina.

**McFarland, Devaun** (2015), Instructor, Information Systems Technology; B.S., St. Lawrence University; M.E., University of South Carolina.

**McKenna, Thomas** (2017), Instructor, Mathematics; B.S., University of South Carolina; M.A., Webster University; M.S., Naval Post Graduate School.

**McLeod, Elaine J.** (2010), Instructor, Information Systems Technology; B.S., Limestone University; M.A., Webster University; Graduate Certificate in Higher Education, University of South Carolina.

**Miller, Valerie** (2009), Instructor, Business; A.A., Austin Peay State University; B.S., M.A.T, University of South Carolina, CPS Certification.

**Moonan, Robert** (2010), Instructor, Humanities, Spanish; B.A., University of Minnesota; M.A., Bowling Green State University; M.A., Minnesota State University; Ph.D., University of South Carolina.

**Mortensen, Chad C.** (2015), Instructor, Psychology; A.A., Ventura Community College; B.A., M.A., California State University, Chico; Ph.D., University of Oklahoma.

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## CAMPUS LOCATIONS

# AIRPORT CAMPUS

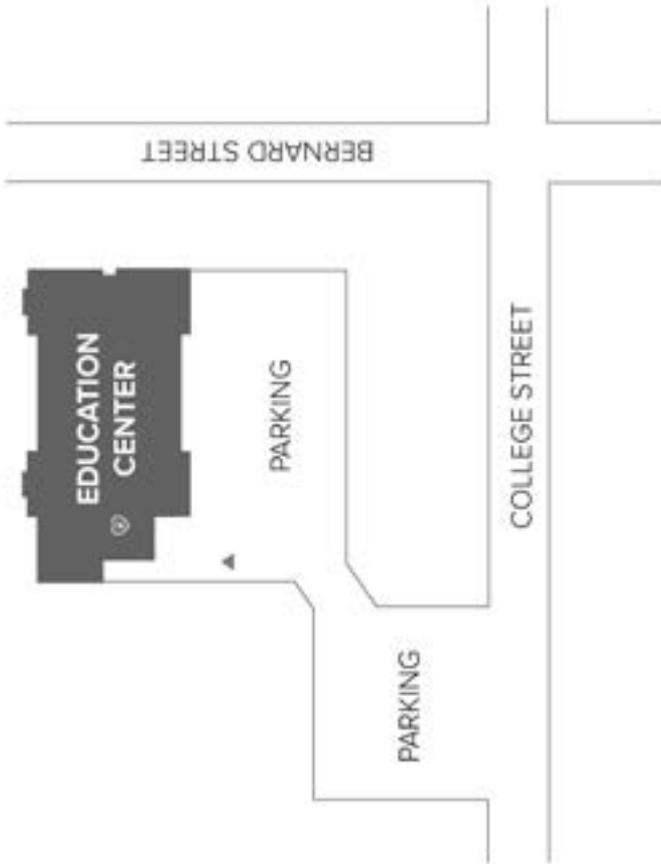


CAMPUS LOCATIONS

# BATESBURG-LEESVILLE CAMPUS

- ▲ Curb access ramps for students with disabilities
- Ⓜ AED Location

29070





## CAMPUS LOCATIONS

# FAIRFIELD CAMPUS





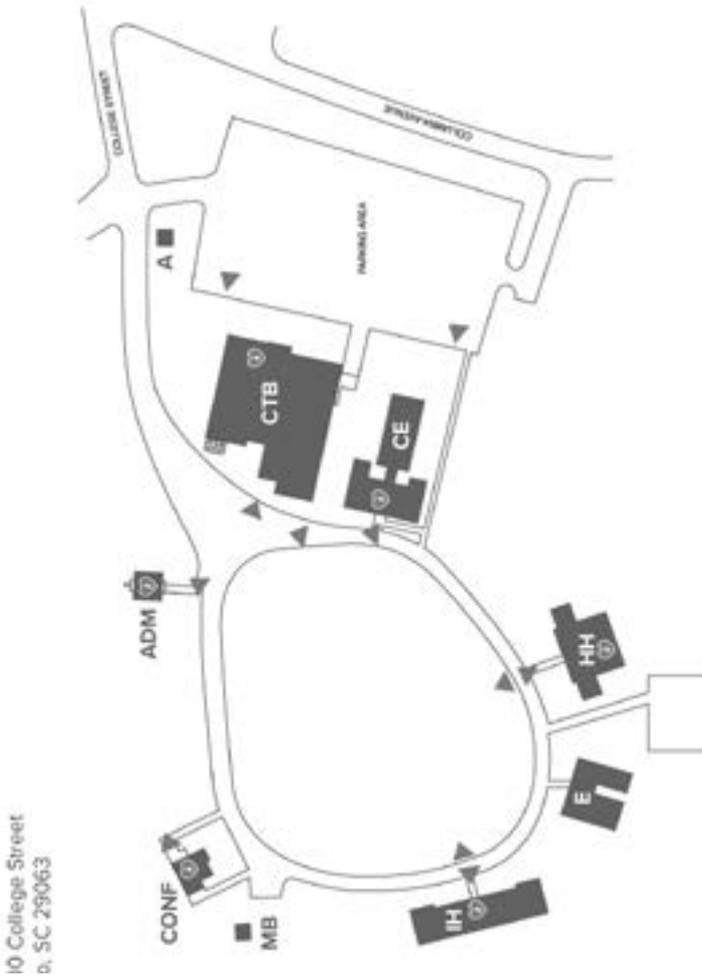
## CAMPUS LOCATIONS

# HARBISON CAMPUS

### Building Legend Harbison Campus

- A - Guest Station
- ADM - Administration
- CONF - Conference Center
- IH - Inno Hall
- E - Storage
- HH - Harbison Hall
- CE - Continuing Education Center
- MB - Maintenance Building
- CTB - Classroom and Theatre Building

- ▲ Curb access ramps for students with disabilities
- 📍 AED Location



## CAMPUS LOCATIONS

# NORTHEAST CAMPUS

### Building Legend Northeast Campus

- CET - Center for Excellence in Technology
- BA - Business Accelerator
- ETS - Engineering, Technology and Sciences Building
- ▲ Carls access ramps for students with disabilities
- 📍 AID Location



3000 N. MAIN  
COLUMBIA, SC 29203

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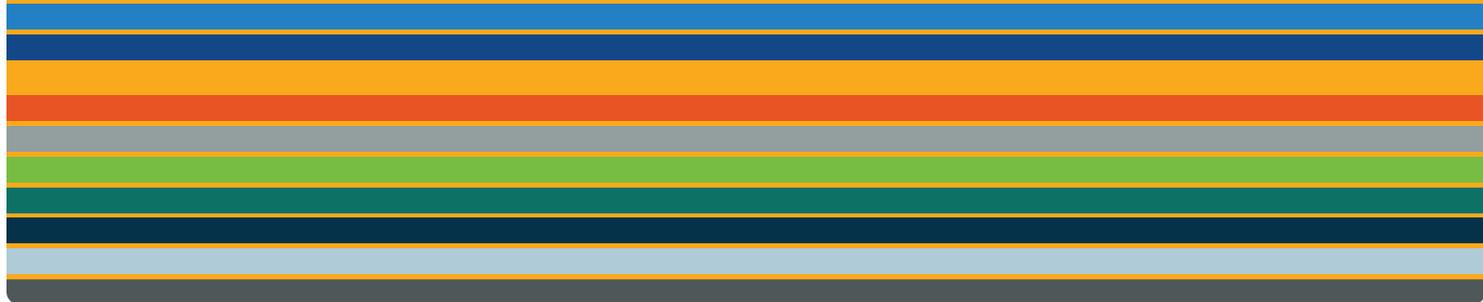
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