DRAKE STATE
COMMUNITY & TECHNICAL COLLEGE

COLLEGE CATALOG 2020-2021

drakestate.edu

2020 – 2021 DRAKE STATE CATALOG
Effective August 2020

DRAKE STATE
COMMUNITY & TECHNICAL COLLEGE

3421 Meridian Street N | Huntsville, AL 35811
256-539-8161| 888-413-7253

2020-2021 Catalog

Effective August 2020

Authorized by the
Alabama Community College System Board of Trustees

Approved by the
Alabama Community College System

Accredited by the
Southern Association of Colleges and Schools Commission on Colleges
1866 Southern Lane | Decatur, GA 30033
404-679-4500

The College reserves the right to make changes as required in course offerings, curricula, academic policies and other rules and regulations affecting students, as determined by the College and approved by the Alabama Community College System Board of Trustees. These changes will govern all enrolled.

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THE PRESIDENT'S MESSAGE

Welcome to Drake State. You've made a great choice. Since 1961, Drake State has provided high-quality, affordable, post-secondary educational opportunities to the Huntsville community. Thousands of students have been enriched by the value of a Drake State education. Our faculty and staff are committed to your success. The moment you begin at Drake State, you become a part of our family where our philosophy is "Your Future – Our Focus".

Whether your journey starts as a dual-enrolled high school student, transfer student, career and technical education student, adult learner, or a person seeking skills for a career transition, exploring new career opportunities or looking to learn something new, we are prepared to serve you and meet your needs.
It is our goal to assist you with attaining a certificate and/or degree to advance your personal success and career advancement.

Thank you for joining the Drake State family, and know that from this day forward, your journey of success includes us.

Patricia G. Sims, Ed.D.
President

Alabama Community College System Board of Trustees

Governor Kay Ivey

Alabama Community College System
Mr. Jimmy H. Baker, Chancellor

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Mr. Al Thompson, Chairman

Congressional District 2
Mr. John Mitchell

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Congressional District 4
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Congressional District 5
Mrs. Crystal Brown

Congressional District 6
Mr. Milton Davis, Vice Chairman

Congressional District 7
Mr. Chuck Smith

MEMBER-AT-LARGE
Mr. Blake McAnally

EX-OFFICIO
Mr. Jeffrey Newman

GENERAL INFORMATION

MISSION STATEMENT

Drake State, a student-centered two-year public institution, offers flexible and affordable university-transfer and technical degrees, certificates, adult and continuing education, and customized workforce training to fulfill the diverse needs of the community.

Approved by the Alabama Community College System Board of Trustees - July 22, 2015

ABOUT THE CATALOG

Drake State publishes and makes available the Academic Calendar, grading policies, and refund policies to students and the general public. The College publishes the Catalog and Student Handbook on the College's website. The Academic Calendar is published within the Catalog and Student Handbook and is also published online.

The Institution's grading policies are published in the Catalog. These policies include an explanation of the College's grading system and procedures for course forgiveness, and academic bankruptcy. The Catalog also publishes grading policies specific to the Registered Nursing Program. Each instructor distributes the grading policy in the course syllabus to every student at the beginning of each semester, which includes methods of evaluation and grading policies specific to the course and instructor. These policies adhere to those published in the Catalog. The refund policies are published in the Catalog.

The College offers courses that are traditional, online, or hybrid format. Students taking online classes can access the Catalog online via the College's website. Students can also access information concerning the Academic Calendar, grading policies, and refund policies on the College's website.

2020-2021 ACADEMIC CALENDAR

FALL SEMESTER 2020

Workweek Hours for Staff and Faculty	
August 13	**7:30AM to 6:30PM**
August 14	**7:30AM to 4:30PM**
August 17-18	**7:30AM to 6:30PM**

August 12	Local Professional Development Day (COLLEGE CLOSED)
August 13-14	Duty Days New Student Orientation/ Regular Registration for Fall 2020
August 14	Tuition and Fees Due by 4PM
August 17	Classes Begin – Day, Evening, and Mini-Term I
August 17-18	Late Registration – Drop/Add
August 18	Tuition and Fees Due by 4PM
September 7	LABOR DAY (COLLEGE CLOSED)
September 21	Last Day to receive a "W" Mini-Term I
Sept 30- Oct 4	Midterm Exams
October 5	Mid-Term Grades are due 5PM
October 7	Last Day of Mini-Term I
October 8	Mini-Term I Grades due in Banner by 11AM
October 12	Mini-Term II Begins/Late Registration (Drop/Add)
October 19	Spring 2021 Registration Begins (Full-term/Mini-Term I/Mini-Term II)
October 23	60% Completion Date for Title IV
November 11	VETERAN'S DAY (COLLEGE CLOSED)
November 13	Last Day to Receive a "W" Full Term and Mini-Term II
November 23-24	State Professional Development (NO CLASSES)
November 25	Faculty Duty Day (NO CLASSES)
November 26-27	THANKSGIVING (COLLEGE CLOSED)
December 7–11	Final Exams
December 11	Last Day of Full-Term/Mini-Term II
December 12	Grades due in Banner by 2PM
December 14-16	Faculty/Staff Duty Days (NO CLASSES)
December 17	Faculty/Staff Professional Development
December 18	Faculty Off/Non-Instructional Duty Days (NO CLASSES)
December 21 – 31	CHRISTMAS HOLIDAY (COLLEGE CLOSED)

SPRING SEMESTER 2021

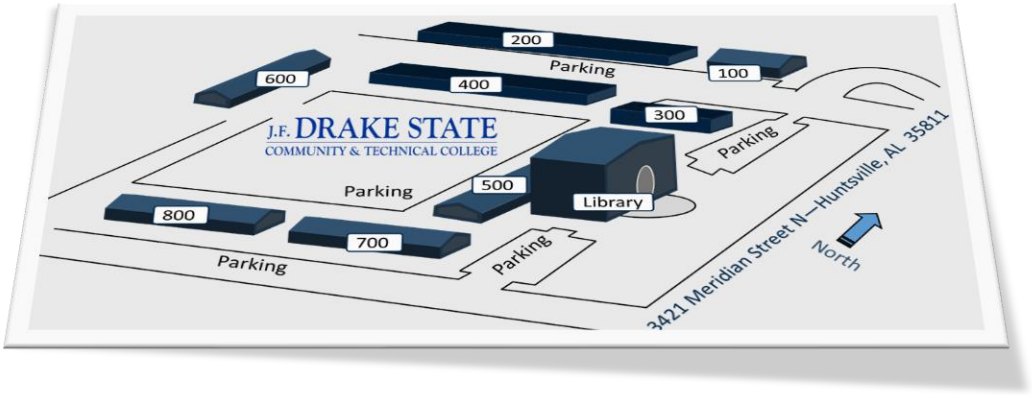
Workweek Hours for Staff and Faculty	
January 4-7	**7:30AM to 6:30PM**

January 1	NEW YEARS DAY Observed (COLLEGE CLOSED)
January 4-5	New Student Orientation/Regular Registration for Spring 2021/ Duty Days
January 5	Tuition and Fees Due Date by 4PM
January 6	Classes Begin – Day, Evening, and Mini-Term I
January 6-7	Late Registration – Drop/Add
January 7	Tuition and Fees Due by 4PM
January 18	DR. M.L. KING, JR. BIRTHDAY (COLLEGE CLOSED)
February 15	Last Day to receive a "W" Mini-Term I
Feb 24 –March 2	Midterm Exams
March 3	Last Day of Mini-Term I/ Mid-Term Grades are Due by 5PM
March 4	Mini-Term I Grades due in Banner by 11AM
March 8	Mini-Term II Begins/Late Registration (Drop/Add)/ Summer and Fall 2021 Registration Begins (Full Term/Mini Term I/Mini-Term II)
March 17	60% Completion Date for Title IV
March 29- April 2	SPRING BREAK (FACULTY AND STUDENTS)
April 1- 2	Local Holiday (COLLEGE CLOSED)
April 15	Last Day to Receive a "W" Full Term and Mini-Term II
May 3- May 7	Final Exams
May 7	Senior Grades Due by 11AM Last Day of Full-Term/Mini-Term II
May 10-12	Faculty Duty Days (NO CLASSES)
May 12	Grades Due in Banner by 2PM Full Term & Mini-Term II
May 13	Graduation
May 13-19	Faculty Off/Non-Instructional Duty Days (NO CLASSES)

SUMMER SEMESTER 2021

Workweek Hours for Staff and Faculty	
May 20	**7:30AM to 6:30PM**
May 21	**7:30AM to 4:30PM**

May 20	Faculty Duty Days (NO CLASSES) /New Student Orientation/Regular Registration for Summer 2021/Tuition and Fees Due by 4PM
May 21	Late Registration – Drop/Add/ Classes Begin – Day, Evening, and Mini-Term I/ Tuition and Fees Due by 4PM
May 31	MEMORIAL DAY OBSERVANCE (COLLEGE CLOSED)
June 16	Last Day to receive a "W" Mini-Term I
June 25	Last Day of Mini-Term I
June 28	Mini-Term I Grades due in Banner by 11AM
June 29	Mini-Term II Begins/Late Registration (Drop/Add)
July 5	INDEPENDENCE DAY (COLLEGE CLOSED)/ 60% Completion Date for Title IV
July 22	Last Day to Receive a "W" Full Term and Mini-Term II
July 29- Aug. 2	Final Exams
August 2	Last Day of Full-Term/Mini-Term II
August 4	Grades are due by 5PM
August 3-5	Faculty Duty Day (NO CLASSES)
August 6-10	Faculty Off/Non-Instructional Duty Days (NO CLASSES)



CAMPUS MAP

BUILDING 100

- Director of Innovation and Program Success
- Nursing Assistant
- Nursing

BUILDING 200

- Electrical Technology
- Engineering Design Technology
- Industrial Systems Technology
- Machine Tool Technology
- Operations Department
- Robotics

BUILDING 300

- Cafetorium

BUILDING 400

- Automotive Technology
- Robotic Welding and Plasma Cutter
- Welding Technology

BUILDING 500

- Accounting Technology
- Business Administration
- Business Office
- Computer Information Systems Technology
- Human Resources
- Information Technology (IT)
- Medical Assisting Technology

BUILDING 600

- Salon/Spa Management
- Student Center

BUILDING 700

- Admissions
- Alabama National Guard
- Career Services
- Dual Enrollment
- Financial Aid
- Liberal Arts / General Studies
- QEP Math Labs
- Student Success Center
- Testing and Assessment Center
- TRiO Program Office
- Veterans Resource Office

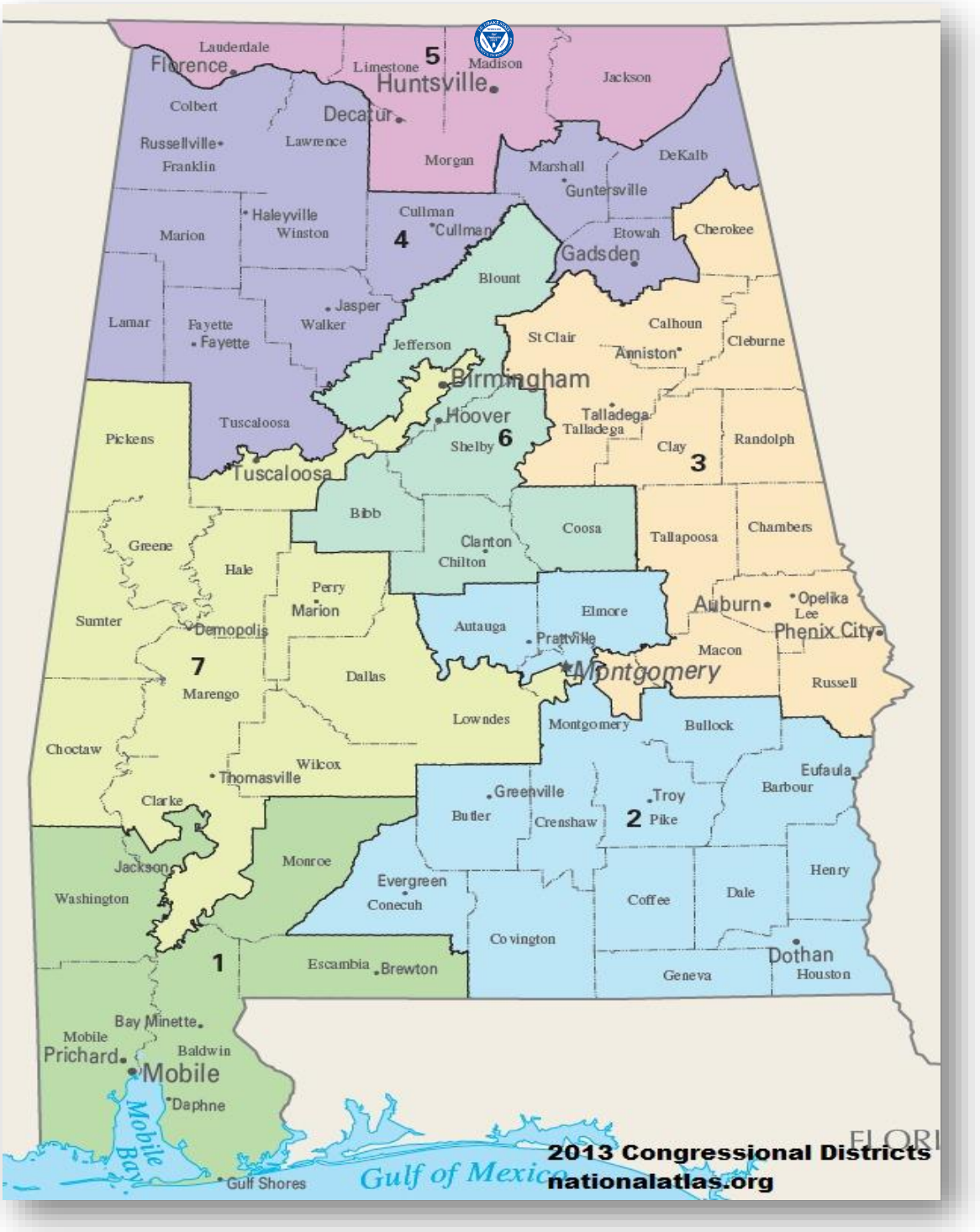
BUILDING 800

- Adult Education
- Biology
- Heating & Air Conditioning Technology
- Liberal Arts / General Studies

S.C. O'NEAL SR. LIBRARY & TECHNOLOGY CENTER

- Associate Dean of Instruction
- Director of Institutional Effectiveness/Title III
- Dean of Instruction
- Dean of Student Services
- Library
- President's Office
- Public Relations

ALABAMA COMMUNITY COLLEGE SYSTEM DISTRICTS



DRAKE STATE IS LOCATED IN DISTRICT 5

INSTITUTIONAL HISTORY

Drake State, located in Huntsville, Alabama, was established in 1961 and opened its doors on September 4, 1962, as Huntsville State Vocational Technical School. The institution was constructed on 30 acres of land deeded by Alabama Agricultural and Mechanical University to the Alabama State Board of Education. In 1966, the name was changed to J. F. Drake State Technical Trade School in honor of the late Dr. Joseph Fanning Drake, a former president of Alabama Agricultural and Mechanical University who served for more than 35 years. On August 22, 1973, the school was given technical college status by the Alabama State Board of Education and assumed the name J. F. Drake State Technical College and was authorized by the Board to offer the Associate in Applied Technology (AAT) degree.

The College received regional accreditation through the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) effective January 2012. The College was granted comprehensive community college status, making it the first and only comprehensive community and technical college in Alabama. In July 2013, the name changed to J. F. Drake State Community and Technical College, reflecting its new status. Drake State offers the Associate in Applied Science (AAS), Associate in Arts (AA) and Associate in Science (AS) degrees, as well as certificates. Students can seamlessly transfer general education courses to other regionally accredited institutions of higher education. Drake State also pioneered articulation agreements in technical disciplines with local universities to enable students to transfer many of their technical courses into baccalaureate programs.

From its inception, Drake State has been committed to training individuals for employment in vocational, technical, and industrial pursuits to support Huntsville's growing economy. The College aims to produce an effective, participatory citizenship with not only economic potential, but civic and social commitment as well.

Presidents

Mr. S. C. O'Neal, Sr.	**1961 – 1983**
Dr. Johnny L. Harris	**1983 – 2000**
Dr. Helen T. McAlpine	**2000 – 2016**
Dr. Patricia G. Sims	**2018 – Present**

ACCREDITATION

Drake State is member of the Alabama Community College System.

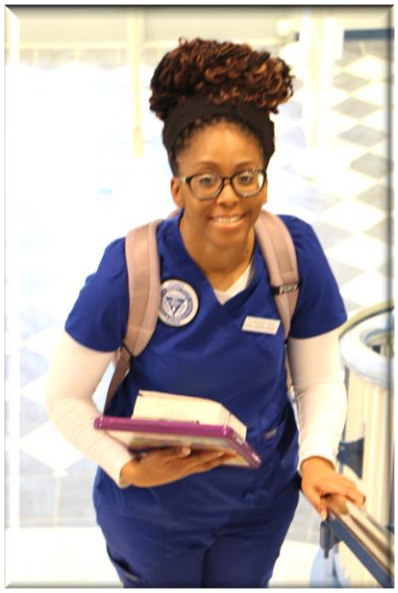
Drake State is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award Associate Degrees and Certificates. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Drake State.

The College's Automotive Technology program is recognized by the National Institute for Automotive Service Excellence, Automotive Service Excellence Education Foundation formerly NATEF, and is an ASE Master Certified Program.

Drake State's Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) program is nationally accredited through HVAC Excellence.

The Machine Tool program is accredited through the National Institute for Metalworking Skills (NIMS).

This Nursing education program is a candidate for accreditation by the Accreditation Commission for Education in Nursing. Contact the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850 Atlanta, GA 30326 or 404-975-5000, www.acenursing.org



GENERAL POLICIES

ADMISSIONS

Admissions Policy Statement

It shall be the policy of Drake State to admit all students who meet the established admission criteria.

Admission decisions will be made without regard to the applicant's race, color, disability, sex, sexual orientation, gender identity and/or expression, religion, creed, national origin, or age.

Academic Advisement

Potential students are encouraged to meet with the academic completion specialist and various program faculty prior to deciding on a particular program of study. The college has a large assortment of media on different careers for students who are undecided on a program of study. Once a student decides on a program of study, the appropriate academic completion specialist and faculty advisor of the chosen program becomes the student's academic advisors.

Admission of First-Time College Students

An applicant who has not previously attended any (regionally accredited) postsecondary institution will be designated a first-time college student or a native student. To be eligible for admission, a first-time college student must meet one of the following criteria:

- hold an Alabama High School Diploma,
- a high school diploma of another state equivalent to an Alabama High School Diploma
- an equivalent diploma issued by a non-public and/or non-regionally accredited high school,
- or a GED Certificate issued by the appropriate state education agency.

A student who meets one of the above criteria shall be classified as "degree-eligible."

Unconditional Admission of First-Time College Students

For unconditional admission, applicants must complete an online application for admission and provide the following:

- An official high school or GED transcript
- One primary form of photo identification
- In-state residency certification

Conditional Admission of First-Time College Students

For conditional admission, applicants must complete an online application for admission and provide the following:

- An unofficial high school or GED transcript**. (Failure to provide all official transcripts by the end of the first semester will prevent a student from future registration.)**
- One primary form of photo identification
- In-state residency certification

Students who are conditionally admitted are not eligible to receive Federal, Veteran educational benefits, or institutional aid.

Admission of Transient Students

A student who attended another postsecondary institution and who seeks credit for transfer to that parent institution may be admitted to the College as a transient student. The student must submit an online application for admission, one primary form of photo identification, in-state residency certification, and an official letter from the institution which certifies that the credit earned at the college will be accepted as a part of the student's academic program. The student is not required to file transcripts of previously earned credits at other postsecondary institutions.

Admission of Transfer Students

Unconditional Admission of Transfer Students

An applicant who has previously attended another (regionally accredited) postsecondary institution will be required to complete an online application for admission and provide the following:

- Official transcripts of all work attempted at all said institutions. Students who have achieved a minimum of a Baccalaureate degree are only required to submit a transcript from the granting institution with the exception of students utilizing Veteran benefits. If transfer students are using Veteran benefits, all transcripts from all institutions must be submitted.
- An official high school or GED transcript.
- One primary form of photo identification
- In-state residency certification

*** EXCEPTION: Veteran Students– All official transcripts including military transcripts must be submitted prior to admission to the institution. Students receiving Veteran's education benefits must have all prior military and civilian training sent to and evaluated by the Office of Admissions prior to any enrollment certifications being submitted to the Department of Veterans Affairs.**

Conditional Admission of Transfer Students

An applicant who has previously attended another (regionally accredited) postsecondary institution will be required to complete an online application for admission and provide the following:

- Unofficial transcripts of work attempted at all institutions. Students who have achieved a minimum of a Baccalaureate degree are only required to submit a transcript from the granting institution. *Please review exception of students utilizing Veteran benefits. **Failure to provide all official transcript by the end of the first semester will prevent a student from future registration.**
- An unofficial high school or GED transcript.
- One primary form of photo identification
- In-state residency certification.
- ACCUPLACER assessment or proof of minimum required scores on the ACT or SAT, or certain exemptions as stated in the Assessment and Placement policy. **OPTIONAL**

Students who are conditionally admitted are not eligible to receive Federal, Veteran educational benefits, or institutional aid.

*** EXCEPTION: Veteran Students– All official transcripts including military transcripts must be submitted prior to admission to the institution.**

Students receiving Veteran's education benefits must have all prior military and civilian training sent to and evaluated by the Office of Admissions prior to any enrollment certifications being submitted to the Department of Veterans Affairs.

Initial Academic Status of Transfer Students

A transfer student whose cumulative grade point average at the transfer institution(s) is 2.0 or above on a 4.0 scale will be admitted on **Clear** academic status. A transfer student whose cumulative grade point average at the transfer institution(s) is less than 2.0 on a 4.0 scale will be admitted on **Academic Probation**.

Admission of International Students

Prior to being issued an I-20 form, international students are required to complete an application for admission and provide the following:

International First-Time Students

A. A certified original translated and evaluated copy of the student's high school transcript.
B. A current and valid passport or other official documentation to verify lawful presence.
C. A current photo (passport-size, preferred).
D. A minimum score of 5.5 on the International English Language Testing System (IELTS), a total score of 61 on the Internet-based Test of English as a Foreign Language (TOEFL), a total score of 173 on the computer-based TOEFL, or a total score of 500 on the paper-based TOEFL.
E. A signed notarized statement verifying adequate financial support.
F. Payment of I-901 Student and Exchange Visitor Information System (SEVIS) Fee.
G. A medical health history with proof of vaccinations.
H. Documentation demonstrating adequate health and life insurance, including repatriation, which must be maintained during all periods of enrollment.

International Transfer Students

A. A certified original translated and evaluated copy of the student's high school transcript verifying completion status and a translated and evaluated transcript from each college attended. Students who have achieved a minimum of a Baccalaureate degree are only required to submit a transcript from the degree granting institution.
B. A signed notarized statement verifying financial support.
C. Copy of student's current Form I-20.
D. Copy of student's Visa and Passport.
E. A medical health history with proof of vaccinations.
F. Documentation demonstrating adequate health and life insurance, including repatriation, which must be maintained during all periods of enrollment.

Re-Enrollment of Students

A student who has not maintained continuous enrollment (i.e., has not been enrolled for three or more consecutive semesters, or has graduated from the college) and wishes to re-enroll must apply for re-entry as a returning student. If continuous enrollment is not maintained, graduation requirements may change.

Audit Student

An audit student is an applicant who wishes to enroll for classes only on an audit basis. The applicant must meet college admissions criteria, which consist of a completed online admission application and high school transcript or GED certificate for a first-time student, or a completed admission application and official transcripts from all colleges attended for a transfer student and all other required documentation.

An applicant who has a baccalaureate degree will need to submit only the transcript from the institution awarding the degree. Audit students must abide by class attendance policy and all standard course requirements, excluding the completing of course examinations. The cost of auditing a course is the same as enrolling for credit.

Senior Citizens

Persons sixty (60) years of age or older may be eligible for a tuition waiver if they qualify for the Senior Adult Scholarship Program. Applicants must meet the following conditions:

A. Comply with the college admission standards as noted earlier in this catalog under Admission of First-time College Students, Admission of Transfer Students or Former Students applying for Readmission.
B. Be an Alabama resident.
C. Be sixty (60) years of age or older.
D. Enroll for credit; noncredit enrollment is not eligible for tuition waiver.

The student is responsible for any fees or other charges applied to the general student body. Senior citizens granted a tuition waiver under the Senior Adult Scholarship Program may receive the tuition waiver only one time per course. Any time a senior citizen repeats a course the student is responsible not only for fees but also for tuition.

General Principles for Transfer of Credit

Equivalent Transfer Credits

Drake State reserves the right to accept or deny course work presented for transfer credit. Typically, all course work from regionally accredited institutions will be accepted as fair equivalent courses at Drake State provided the college has equivalent courses at all appropriate levels. Courses not having fair equivalents at Drake State may or may not be accepted. For additional information, students may contact the Office of Admissions.

Any student who has previously attended another regionally accredited postsecondary institution is considered a transfer student and is required to furnish official transcripts of ALL work attempted at each institution. Transcripts are evaluated by the Office of Admissions with appropriate transfer credits placed on the Drake State transcript including current academic standing. Accepted coursework will be listed in the transfer category with credit hours earned awarded. General principles for the transfer of credit for degree eligible students and the standards for academic progress of transfer students are used. Students can also utilize the Statewide Transfer and Articulation Reporting System (STARS) website for transfer credit information.

Coursework accepted as transfer work or credit toward an undergraduate program of study must represent collegiate level coursework relevant to course content and level of instruction equivalent to those of students enrolled in the Drake State undergraduate programs. In assessing and documenting equivalent learning and the awarding of credit, the college may use guides recognized or published by the American Council on Education, the American Association of Collegiate Registrars and Admissions Officers and the Alabama Community College System Uniform Course Directory.

All transfer work or credit earned from non-traditional sources awarded by Drake State allows students the opportunity to achieve their educational goals and supports the college's mission. As a member of the Alabama Community College System, Drake State assumes the responsibility for providing a quality education to all students.

A transfer student from a collegiate institution not accredited by the appropriate regional association may request an evaluation of transfer credits after completing 15 semester hours at Drake State with a cumulative GPA of 2.0 or above.

A transfer grade of “D” will only be accepted when the transfer student’s cumulative GPA is 2.0 or above. If the student has a cumulative 2.0 or above, the “D” grade will be accepted the same as for native students. Credit may be extended based on a comprehensive evaluation of demonstrated and documented competencies and previous formal training.

Credit for Life Experience and Noncredit Education

By policy of the Alabama Community College System, students may receive credit for previous work experience or non-credit continuing education, such as professional development workshops or industry-sanctioned training, whether provided by the college or other training providers. Allowable credit is determined by the program instructor and the Office of Admissions, with the approval of the Dean of Instruction.

Credit for academic transfer courses can be awarded by examination or nationally recognized guidelines (such as AP, CLEP, ACT/PEP, DANTES, Challenge Exams, ACE PONSI/CREDIT, or ACE/MILITARY). Credit for non-transfer technical courses may be awarded through examination, portfolio evaluation, and demonstrated mastery of the competencies taught in the courses for which credit is to be given.

Credit awarded in this manner is referred to as "experiential credit," awarded through non-traditional means. A student may not be awarded experiential credit in excess of 25% of the total requirement of the program award being sought. Credits awarded in this manner do not count toward the requirement that a minimum of 25% of credits awarded in any program must be taken at the institution granting the award.

Course Credit by Departmental Challenge Examination

Students may be awarded credit for documented competencies and formal training on challenge examinations.

Specialized Military Training

The College adheres to policies prescribed by the Guide to the Evaluation of Educational Experiences in the Armed Services in granting credit for military course work.

Advanced Placement

Students who have completed college level offered by high schools and have earned a score of 3 or higher on the AP Exam will receive credit.

Articulated Credit

A planned process that allows a high school student enrolled in certain occupational/technical programs the opportunity to progress from secondary to postsecondary in a sequential manner of instruction. (Statewide Articulation.)

Credit for Transfer

Any student who has previously attended another regionally accredited postsecondary institution is considered a transfer student and is required to furnish official transcripts of ALL work attempted at each institution. Transcripts are evaluated by the Office of Admissions with appropriate transfer credits placed on the Drake State transcript including current academic standing.

CLEP – College Level Examination Program

Credit for subject examinations is granted based on 50th percentile scores with courses awarded for credit listed in the college catalog. Drake State is not currently a testing center for CLEP examinations, but will evaluate and accept credits for CLEP examinations for courses listed in the college catalog. Students will be responsible for scheduling and paying for CLEP examinations. For information on testing centers, examinations, fees and other details, please visit the College Board website https://clep.collegeboard.org/about-clep

ADMISSION OF NURSING STUDENTS

Minimum admission standards for the Associate Degree Nursing Program (nursing program)
Because graduates of the nursing program must pass a licensure examination, separate policies and guidelines higher than the institutional standards have been established.

Admission Policies

Selection to the Associate Degree Nursing Program at Drake State is based on criteria set by the selection committee.

ADMISSION CRITERIA FOR NURSING PROGRAMS

- Unconditional admission to the college.
- A completed application for admission to nursing program received before published deadline.
- A minimum of 18 ACT composite score National or Residual.
- A minimum of 2.5 GPA for nursing required academic core courses and minimum 2.0 cumulative GPA at current, native institution or cumulative 2.0 in institution from which student is transferring.
- A minimum of 2.5 GPA cumulative high school GPA for students without prior college courses (GED will be used if applicable).
- Meeting the essential functions for nursing.
- Eligibility for ENG 101, MTH 100, and BIO 201.
- **Mobility students** are additionally required to provide proof of unencumbered, Alabama licensure (i.e. LPN, Paramedic). No work history is required. No associate degree is required for paramedics. Prerequisites required for Mobility program application: ENG 101, MTH 100 or higher-level math, BIO 201 & 202, SPH 106 or 107, and PSY 210.

Admission to the Associate Degree Nursing Program is competitive, and the number of students is limited by the number of faculty and clinical facilities available. Meeting minimal requirements does not guarantee acceptance.

In addition, the applicant must:

1. Complete an application to Drake State.
2. Submit official transcripts from all high schools and/or colleges attended.
3. Be able to provide his/her own transportation to clinical facilities.

Understand that admission to the nursing program is on a space-available basis and is based on a comparative evaluation of all test scores, transcripts, and application information.

Standards of Conduct

The nursing student shall comply with legal, moral, and legislative standards which determine unacceptable behavior of the nurse and which may be cause for denial of license to practice as a Nurse (registered and/or practical), in accordance with the Alabama Law Regulating practice of Nursing as stated below:

The Board may reprimand, fine, probate, suspend, revoke or otherwise discipline any registered nurse or licensed practical nurse upon proof that the person:

- Is guilty of fraud or deceit in procuring or attempting to procure a license, has been convicted of a felony offense, has been convicted of, or has entered a plea of guilty, regardless of court disposition, to a charged criminal act involving moral turpitude or of gross immorality that would tend to bring reproach upon the nursing profession. Such criminal acts include, but are not limited to, offenses involving drugs, theft, lewdness, sexual misconduct, abuse, violence, fraud, and/or any other conduct detrimental to the public's health, safety or welfare.
- Is unfit or incompetent due to the use of alcohol, or is addicted to the use of habit-forming drugs to such an extent as to render the registered nurse or licensed practical nurse unsafe or unreliable.

- Has been convicted of any violation of a federal or state law relating to controlled substances, including misdemeanor and felony offenses.
- Is guilty of unprofessional conduct of a character likely to deceive, defraud, or injure the public in matters pertaining to health.

FAILURE TO COMPLY WITH ANY OF THE ABOVE STIPULATIONS WHILE IN THE NURSING PROGRAM CONSTITUTES GROUNDS FOR DISMISSAL FROM THE PROGRAM.

It is important for nursing students to know about the Alabama Board of Nursing's regulations on the review of candidates for eligibility for initial and continuing Licensure. There will be questions on the Application for Licensure as Nurse by Examination which ask, "Have you ever been arrested or convicted of a criminal offense?" Application to write the examination may be denied on the basis of this review. Although these policies refer specifically to Alabama, other states have similar stipulations regarding Licensure.

Program Policies

Because graduates of the Nursing Program must pass the national licensing examination upon completion of their program, separate policies and guidelines that may be higher than the institutional standards have been established. Each student will be given a copy of the appropriate policies on admission to the program.

Note: Although some separate policies and guidelines have been established for the Nursing program, nursing students must comply with the policies set forth in the College Catalog.

Nursing Programs Essential Functions

The Alabama Community College System endorses the Americans with Disabilities Act. In accordance with College policy, when requested, reasonable accommodations may be provided for individuals with disabilities.

Physical, cognitive, psychomotor, affective and social abilities are required in unique combinations to provide safe and effective nursing care. The applicant/student must be able to meet the essential functions with or without reasonable accommodations throughout the program of learning. Admission, progression and graduation are contingent upon one's ability to demonstrate the essential functions delineated for the nursing programs with or without reasonable accommodations. The nursing programs and/or its affiliated clinical agencies may identify additional essential functions. The nursing programs reserve the right to amend the essential functions as deemed necessary.

In order to be admitted and to progress in the nursing program, one must possess a functional level of ability to perform the duties required of a nurse. Admission or progression may be denied if a student is unable to demonstrate the essential functions with or without reasonable accommodations.

The essential functions delineated are those deemed necessary by the Alabama Community College System nursing programs. No representation regarding industrial standards is implied. Similarly, any reasonable accommodations made will be determined and applied to the respective nursing program and may vary from reasonable accommodations made by healthcare employers.

The essential functions delineated below are necessary for nursing program admission, progression and graduation and for the provision of safe and effective nursing care. The essential functions include but are not limited to the ability to:

1. Observe and discern subtle changes in physical conditions and the environment
2. Visualize different color spectrums and color changes
3. Read fine print in varying levels of light
4. Read for prolonged periods of time
5. Read cursive writing
6. Read at varying distances
7. Read data/information displayed on monitors/equipment
8. Interpret monitoring devices
9. Distinguish muffled sounds heard through a stethoscope
10. Hear and discriminate high and low frequency sounds produced by the body and the environment
11. Effectively hear to communicate with others
12. Discern tremors, vibrations, pulses, textures, temperature, shapes, size, location and other physical characteristics
13. Detect body odors and odors in the environment
14. Verbally and in writing, engage in a two-way communication and interact effectively with others from a variety of social, emotional, cultural and intellectual backgrounds
15. Work effectively in groups
16. Work effectively independently
17. Effectively read, write and comprehend the English language
18. Consistently and dependably engage in the process of critical thinking in order to formulate and implement safe and ethical nursing decisions in a variety of health care settings
19. Demonstrate satisfactory performance on written examinations, including mathematical computations without a calculator
20. Satisfactorily achieve the program objectives
21. Handle small delicate equipment/objects without extraneous movement, contamination or destruction
22. Move, position, turn, transfer, assist with lifting, or lift and carry clients without injury to clients, self, or others
23. Maintain balance from any position
24. Stand on both legs
25. Coordinate hand/eye movements
26. Push/pull heavy objects without injury to client, self, or others
27. Stand, bend, walk and/or sit for 6-12 hours in a clinical setting, performing physical activities requiring energy without jeopardizing the safety of the client, self, or others
28. Walk without a cane, walker, or crutches
29. Function with hands free for nursing care and transporting items
30. Transport self and client without the use of electrical devices
31. Flex, abduct and rotate all joints freely

32. Respond rapidly to emergency situations
33. Maneuver in small areas
34. Perform daily care functions for the client
35. Coordinate fine and gross motor hand movements to provide safe effective nursing care
36. Calibrate/use equipment
37. Execute movement required to provide nursing care in all health care settings
38. Perform CPR and physical assessment
39. Operate a computer
40. Convey caring, respect, sensitivity, tact, compassion, empathy, tolerance and a healthy attitude toward others
41. Demonstrate a mentally healthy attitude that is age appropriate in relationship to the client
42. Handle multiple tasks concurrently
43. Perform safe, effective nursing care for clients in a caring context
44. Understand and follow the policies and procedures of the College and clinical agencies
45. Understand the consequences of violating the student code of conduct
46. Understand that posing a direct threat to others is unacceptable and subjects one to discipline
47. Meet qualifications for licensure by examination as stipulated by the Alabama Board of Nursing
48. Not to pose a threat to self or others
49. Function effectively in situations of uncertainty and stress inherent in providing nursing care
50. Adapt to changing environments and situations
51. Remain free of chemical dependency
52. Report promptly to clinicals and remain for 6-12 hours on the clinical unit
53. Provide nursing care in an appropriate time frame
54. Accepts responsibility, accountability, and ownership of one's actions
55. Seek supervision/consultation in a timely manner
56. Examine and modify one's own behavior when it interferes with nursing care or learning

Upon admission, an individual who discloses a disability can request reasonable accommodations. Individuals will be asked to provide documentation of the disability in order to assist with the provision of appropriate reasonable accommodations. The respective College will provide reasonable accommodations but is not required to substantially alter the requirements or nature of the program or provide accommodations that inflict an undue burden on the respective College. In order to be admitted one must be able to perform all of the essential functions with or without reasonable accommodations. If an individual's health changes during the program of learning, so that the essential functions cannot be met with or without reasonable accommodations, the student will be withdrawn from the nursing program. The nursing faculty reserves the right at any time to require an additional medical examination at the student's expense in order to assist with the evaluation of the student's ability to perform the essential functions.

Requests for reasonable accommodations should be directed to the College Counselor.

Nursing Program Progression Policy

In order to progress in the nursing program, the student must:

1. Achieve a grade of C or better in all required general education and nursing courses.
2. Be acceptable by **all** clinical agencies for clinical experiences.
3. Maintain ability to meet **all** essential functions for nursing with or without reasonable accommodations.
4. Must have been enrolled in a **nursing** course at Drake State in the past twelve months or less.
5. Maintain program health requirements.
    a) A total of two unsuccessful attempts in two separate semesters (D, F, or W) in the nursing program will result in dismissal from the program.
    b) A student may be reinstated to the nursing program only one time. The reinstatement is not guaranteed due to limitations in clinical spaces. All nursing program admission standards must be met.
    c) Students who have not been enrolled in nursing courses for twelve months or more must apply as a new student.
    d) A student must have a 2.0 cumulative GPA at the current institution for reinstatement.
    e) If a student has a documented extenuating circumstance that should be considered related to a withdrawal or failure, then this student may request a hearing before the Admissions Committee or other appropriate college committee for a decision on repeating a course or readmission to the program.
    f) ADN students whose second unsuccessful attempt occurs in NUR 211 or 221 may apply for the Mobility program. These students must meet all admission requirements for Mobility, including a 2.5 cumulative GPA and valid Alabama Practical Nursing License.

Definitions

Reinstatement: Students who have a withdrawal or failure in a nursing course and are eligible to return to that course will be considered for reinstatement to the program.

Readmission: Students not eligible for reinstatement may apply for program admission as a new student and must submit all application criteria. If accepted as a new student the student must take, or retake, all nursing program courses.

Process for Reinstatement

1. Students should first schedule an appointment with a nursing faculty/advisor to discuss eligibility for reinstatement.
2. Students must apply for reinstatement to the nursing program and submit the application with ACT test results and application for reinstatement by the following deadline:
    a. Application for reinstatement must be made the **semester prior** to the semester of reinstatement. Example: if a student wishes to be reinstated into NUR114 in the summer 2020 semester, the application needs to be submitted prior to mid-term of the spring 2020 semester.

   b. Student selection for reinstatement will be made no less than one week prior to the end of the semester; students will be notified prior to the end of the semester.
3. Students must apply for readmission to the college if not currently enrolled. College readmission must be accomplished by the following deadlines:
   a. Application for readmission must be submitted the semester ***prior to*** the reinstatement semester. Example: if the student applies be reinstated into NUR114 in the summer 2020 semester, the application needs to be submitted prior to mid-term of the spring 2020 semester.
   b. Student selection for readmission will be made no less than one week prior to the end of the semester; students will be notified prior to the end of the semester.
4. Students must update immunizations, CPR, drug testing, and background screening according to program policy.
5. Students must demonstrate competency in previous course(s) as required by the College's nursing program.

Transfer Policy

The transfer policy applies to students desiring to transfer between Alabama Community College System institutions. It does not apply to students wishing to transfer from other institutions that are not a part of the Alabama Community College System.

Criteria for Transfer

1. Must meet minimum admission standards for the nursing program.
2. Must possess a grade of C or better in all nursing program required courses taken at another institution and possess a minimum of a 2.0 cumulative GPA at time of transfer.
3. Dean/Director of previous nursing program must provide a letter of eligibility for progression in previous nursing program.
4. Must comply with all program policy requirements at accepting institution.
5. Complete at least 25% of the nursing program required courses for degree /certificate at the accepting institution.
6. Must meet acceptability criteria for placement at clinical agencies for clinical experience.
7. Acceptance of transfer students into nursing programs is limited by the number of faculty and clinical facilities available. Meeting minimal standards does not guarantee acceptance.

Transient Student Policy

The transient policy applies only to students desiring to transfer between Alabama Community College System institutions. It does not apply to students wishing to transfer from other institutions that are not a part of the Alabama Community College System.

Criteria for Transient Status

1. Must meet minimum admission standards for the nursing program.
2. Must possess a grade of C or better in all nursing program required courses taken at another institution and possess a minimum of a 2.0 cumulative GPA.

3. Dean/Director of previous nursing program must provide a letter of eligibility for progression in previous nursing program.
4. A student enrolled at another institution must secure permission from that institution by submitting an application for admission to the College and a Transient Student Form completed by an official (Nursing Program Dean/Director) of the primary institution.
5. Transient students must complete a Transcript Request Form at the end of the term before a transcript will be issued to the primary institution.
6. Must comply with all program policy requirements at accepting institution.
7. Must meet acceptability criteria for placement at clinical agencies for clinical experience.
8. Acceptance of transient student into a nursing program is limited by the number of faculty and clinical facilities available. Meeting minimal standards does not guarantee acceptance.

Program Completion

Students completing NUR112, 113, 114, and 115 and required academic courses will be awarded the Practical Nursing certificate. Students who have completed required academic courses and continue in the program through completion of NUR 211 and 221 will be awarded an Associate Degree in Applied Science. Students are responsible for meeting all the progression and graduation requirements.

PN Progression

Students completing NUR 112, 113, 114, and 115 at an institution that only offers the PN program and who wish to transfer to another institution to complete the ADN degree, must meet the requirement for 25% course completion at college of graduation. Students who cannot meet the 25% course requirement must apply for mobility and take the transition course to meet the 25% course requirement.

Policies Related to Clinical Participation

Because participation in clinical settings is an integral part of the ADN program curriculum, each student is required to comply with all policies and procedures of the contracted clinical agencies. Therefore, each student is expected to uphold the contractual terms designated in these contracts prior to being admitted to a course with a clinical component. Clinical agencies reserve the right to amend a contract and ask for additional requirements to be met as deemed necessary to maintain the safety and welfare of the patient, student, and/or agency employee. Violation of nursing program or health care agency policies will result in dismissal from the program.

The following is a list of examples of clinical agency contractual policies that must be completed and on file prior to students being allowed to participate in clinical experiences:

- Proof that the student has undergone physical examination and is free from disease that may be transmitted to patients, families, and employees. This process includes having the Nursing Program's Health Form properly completed and signed by a Healthcare Provider, proof of two-step TB skin testing and follow-up, MMR, Varicella, Tetanus, and the Hepatitis B vaccination series.

- Proof of malpractice insurance coverage in amounts required by the agencies (copy of policy) and evidence that all students purchase the malpractice insurance prior to participating in their first clinical experience. The college therefore requires all students to purchase malpractice insurance when registering for the first semester. Malpractice insurance must be kept in force for the designated amount of coverage during the time a student is enrolled in the program.
- Agencies recommend students carry health insurance to cover the cost of medical care should a student become sick while at the clinical agency. The school or clinical agency does not provide free or discounted medical care to students participating in clinical experiences.
- Proof that students have undergone drug testing as precondition to beginning clinical experiences and that results indicate that the student is drug free.
- Proof of current BLS (Basic Life Support) certification at Health Care Provider level.
- Proof that students have been instructed in hospital policies including, but not limited to, issues of confidentiality (HIPAA), OSHA policies and procedures, Fire and Safety procedures, and documentation policies and procedures.
- Students are advised to have reliable transportation to arrive at the clinical site on time. Lack of reliable transportation may prohibit the student from maintaining clinical attendance and participation, which may result in failing from the program. If a student uses public transportation, please be aware that the clinicals start at 0630 or 0645, and make sure that public transportation that will get the student at least 15 -30 minutes before clinicals start, is available. If the schedules for public transportation do not permit the student to reach the clinical site on time, the student needs to seek alternative transportation.
- Criminal background checks are required prior to participation in clinical practice.

Other Program Policies

The intensity of the nursing curriculum and the development of acceptable workplace habits mandate that the ADN program establish departmental policies regarding absences and tardiness, professional and ethical conduct, uniform dress code, and testing. Since nursing is a profession that demands high ethical and professional standards, success in nursing depends on the nurse's ability to provide safe, effective care while demonstrating acceptable workplace habits. Departmental policies promote the development of acceptable workplace habits and are consistently enforced. Attendance policies are included on each course syllabus and dress code and other policies related to clinical are included in the syllabi of courses with a clinical component.

Professional and Ethical Conduct

The ADN student's behavior, appearance, and attitude shall reflect respect for and accountability to the nursing profession at all times. Inappropriate conduct in the classroom or clinical setting may result in termination from the nursing program. Students must not represent themselves as nursing students or engage in patient/client care as nursing students except when participating in an assigned, planned learning activity in a practice setting integral to the curriculum. A student who demonstrates evidence of unethical or inappropriate conduct or unsafe clinical practices will be terminated from the program and will not be eligible for readmission. This includes a student who receives a complaint from or is

prohibited from participating in a clinical agency utilized by the program for clinical learning experiences, or who is withdrawn from the clinical agency due to unprofessional or unethical conduct. Some examples of unprofessional unethical conduct include, **but are not limited to**, the following:

1. Use of profanity
2. Dishonesty—either by telling a falsehood or taking something that does not belong to you
3. Unprofessional verbal and/or physical confrontations
4. Display of inappropriate physical contact
5. Failure to follow college, ADN program, and/or clinical agency dress codes and other policies
6. Not following appropriate channels of command
7. Unlawful and/or unethical behavior
8. Breach of confidentiality
9. Falsifying documents
10. Unsafe clinical practices
11. Academic misconduct

Academic Misconduct

It is considered cheating to receive or give unauthorized assistance in any test, assignment or other assessment that is done for course completion requirements. The work done by the student needs to be their own work, and not derived from other sources. If other sources are used by the student in order to complete an assignment, the source needs to be credited. Plagiarizing work done by others, including from online sources, is not permitted.

Test booklets and other assessment material used by the division remains the property of the division, and must be returned to the instructor upon completion of the test. Reproduction of the testing materials is not permitted.

A student found in violation of the academic misconduct policy will be recommended for dismissal from the program and will not be eligible to re-enroll.

Academic Caution

Students who are making unsatisfactory progress in a unit/course of study are counseled and placed on academic caution status until the end of the unit/course. If by the end of that unit/course, the student's averaged grade is below 75, he/she must repeat that unit/course of study before program completion.

Examinations and Assessments

Students who are absent on the day a test is given will be allowed to take a "Make-up" test at the discretion of the instructor. Students are required to make arrangements with the instructor to take "make-up" tests their first day back in class. All make-up tests are given either before or after the class period. Students will not be allowed to make-up tests during class hours. Please refer to the individual course syllabi for specific testing policies for each course.

Comprehensive Assessment

Comprehensive Assessment (CA) examinations will be administered prior to or in place of the final examination for each nursing course. The CA will be created by an outside agency. The examinations will be online and proctored.

Nursing Dress Code: Student Uniform

The student dress code has been developed to allow the nursing program to consistently put forth a professional appearance. At all times students, whether in a clinical agency on clinical assignments or in any way representing the college, must be in compliance with the standards of attire established by the specific agency or the College. Faculty members of the College have the responsibility to interpret compliance with the dress code and to assure conformance with the standards. Students must wear the official school uniform. **No deviations in style or color will be permitted.** The nursing instructors will specify the color and style of the uniform. Students will also adhere to guidelines about hair, nails, makeup, body art and other guidelines as specified by the faculty.

Nursing Student Drug Screening

As stipulated by health care agencies with which Drake State contracts for clinical experience, students must abide by the policies established by these agencies relative to drug screening and any subsequent revisions to these policies in order to participate in clinical experiences at the agency. This includes annual drug screening and subsequent screenings should the student be perceived to exhibit behaviors indicative of substance abuse during a clinical experience. Fees for all drug and alcohol screening must be paid by the students.

I. **Pre-Clinical Screening**

A. All currently enrolled students will receive notice of drug screening guidelines prior to the beginning of the clinical laboratory rotation. All other students will receive notice of the drug screening guidelines prior to admission to the nursing program.

B. All currently enrolled students, and all students accepted for admission into the nursing program will be required to complete a consent form for drug screening as a condition for admission or readmission to the nursing program.

C. Drug screening will be scheduled and conducted by a drug testing company coordinated by the Health Sciences Division. A fee will be assessed.

D. Failure to complete the drug and alcohol screening as required by clinical agencies will prohibit the student from completing the clinical component of required nursing courses.

E. Results of drug screening will be sent to the chairperson of the Health Sciences Division. The student will, whenever reasonably possible, be informed of the screening results by the chairperson of the Health Sciences Division within seven (7) working days of the chairperson receiving the results.

F. A positive drug screening result will prohibit the student from completing the clinical component of required nursing courses. A student must have a negative drug screening test on file to complete the courses.

a. Students must list all medications currently being taken. The Collector will explain the collection procedure and the Chain of Custody form. The student will be provided with a sealed collection container.
b. Students must remove unnecessary outer garments (coats, sweaters, etc.) and remove items from pockets when entering the collection site.
c. The Collector will collect a monitored urine specimen.
d. In the presence of the student, the Collector will seal the urine specimen with a tamper-proof security seal and affix an identification label with code number.
e. The student will verify the information on the identification label, initial the security seal, and read and sign the Chain of Custody Form and give the student the appropriate copy.
f. The Collector will sign the Chain of Custody Form and give the student the appropriate copy.
g. The Collector will forward the sealed urine specimen and Chain of Custody form to the appropriate agency.

II. Urine samples will be screened for the following (other screens may apply):

1. D-Methamphetamine
2. Barbiturates
3. Benzodiazepines
4. Cocaine
5. Marijuana
6. Methaqualone
7. Opiates
8. Methadone
9. Oxycontin
10. Ecstasy
11. Codeine
12. Morphine
13. Hydrocodone
14. Hydromorphone
15. Oxycodone

III. **Confidentiality**

The Chairperson of the Health Sciences Division will receive all test results. Confidentiality of the results will be maintained with only the Chair or designee of the Chair and the student having access to the results with the **exception of legal actions which require access to the results.**

Readmission

To be considered for readmission, students who withdraw, or are withdrawn from the nursing program due to (1) a positive drug screen, or (2) the inability of a student to successfully participate or complete the required drug and alcohol screening must:

A. Submit a letter from a treatment provider approved by the nursing program verifying completion of an appropriate substance abuse treatment program, and;
B. Submit to an unannounced drug screen at the student's expense prior to readmission.
C. A positive screen at this time will result in ineligibility for readmission.

IV. Drug screening programs suggested or required by the Alabama Board of Nursing, Drake State, and/or various institutions with which the college contracts, may vary from time to time in any or all of their aspects. Students will be required to comply with screening which will satisfy any program or requirement established by the Alabama Board of Nursing or any health care facility with whom the college contracts for clinical experience, whether pre-clinical drug screening, random drug screening, or incident related screening.

Some of the classes of drugs for which screening will be conducted are available by prescription from health care practitioners. Prescription drugs prescribed to a student by an appropriate health care practitioner may nevertheless be subject to abuse and may give rise to reasonable suspicion testing or incident testing. The fact that student has a prescription for one or more of the classes of drugs which are legally prescribed by a health care practitioner does not necessarily, in and of itself, excuse the student from the effect of this policy.

Background Check for Nursing Students

As stipulated within clinical contracts, students must conform to the rules, policies, and procedures of the clinical affiliates, which include background checks.

I. Guidelines

Background checks will be conducted according to the following guidelines:

- Nursing students must sign the appropriate consent(s) prior to the background check. A copy of the signed consent(s) will be maintained as indicated.
- The background checks will be scheduled and conducted by a designated company determined by the College. The designated company will be provided a copy of the policy. **The student will be responsible for the cost of the background check.** Results of the background check will be sent to the Health Sciences Division Chair.
- If a student fails to submit to the background check at the designated time, the student should contact the Health Sciences Division Chair in order to proceed with the background check. If the student fails to submit to the background check as delineated, the student will be administratively withdrawn from the program.
- The background check may include, but is not limited to:
  a. Criminal and Civil History/Records which reveals felony and misdemeanor, arrests and convictions, and pending cases usually including the date, nature of the offense, sentencing date, disposition, and current status.
  b. **Sex Offender** which includes a search of the state or county repository for known sexual offenders.

c. **Social Security Number Trace** which is a verification that the number provided by the individual was issued by the Social Security Administration, and is not listed in the files of the deceased.

d. **Office of the Inspector General** (OIG) which identifies those individuals who have committed offenses deeming them ineligible to care for patients receiving Medicare benefits.

e. **Employment and Education Verification**

f. **Personal References/Interviews**

g. **Any Other Public Record**

- The student will be informed of the results of <u>significant</u> findings in the background check. A *significant finding in a background check is a background check that reveals information that may prohibit that person from participating in clinical supervision in any healthcare facility contracted by the college to provide clinical experience for students of the nursing program, according to that facility's policy.*
- If any clinical agency refuses to allow a student to attend clinicals on the basis of their background check results, that student will be terminated from the nursing program. That student will not be eligible to re-enter the nursing program.
- The student will be provided a copy of background check results, if significant. Any dispute of the accuracy of the background check must be submitted in writing to the Health Sciences Division office within seven (7) days of notification of receipt of the results.
- Background checks which could render a student ineligible to participate in clinical learning experiences include, but are not limited to, certain convictions or criminal charges which could jeopardize the health and safety of patients and sanctions or debarment. Felony or repeated misdemeanor activity within the past seven (7) years and Office of the Inspector General violations will normally prohibit the obtainment of clinical learning experiences with clinical affiliate(s), but each significant finding in the background check will be reviewed individually.

II. **Confidentiality**

The Health Sciences Division Chair will review the background check results. Confidentiality of the results will be maintained with only the Chair or designee of the Chair and the student having access to the results with the **<u>exception of legal actions which require access to the results.</u>**

Dual Enrollment

Institutions within The Alabama Community College System are authorized to establish dual enrollment/dual credit programs with local boards of education in the College service area. Courses offered by postsecondary institutions shall be of postsecondary level and enrolled students must pay normal tuition as required by the postsecondary institution. A student is eligible for dual enrollment/dual credit if the student meets the following criteria:

A. The student must meet the entrance requirements established by institutions of postsecondary education;

B. The student must have a minimum cumulative 2.5 GPA or better GPA on a 4.0 scale in completed high school courses and must maintain a minimum of "C" average;
C. The student must have written approval of the appropriate principal and the local superintendent of education;
D. The student must be in grade 10, 11, or 12, or have an exception granted by the participating postsecondary institution upon the recommendation of the students' principal and superintendent and in accordance with Alabama Administrative Code 290-8-9-12 regarding gifted and talented students;
E. Students may enroll in academic, career and technical or health courses in accordance with guidelines of the Department of Postsecondary Education;
F. Students enrolled in courses offered during the normal high school day on or off the high school campus shall have prior permission of the students' principal, superintendent, and the participating postsecondary institution president;
G. Parental permission and travel for courses offered off the high school campus during the normal school day will be administered under the auspices of local boards of education; and
H. Six semester credit hours at the postsecondary level shall equal one credit at the high school level in the same or related subject. Partial credit agreements shall be developed between the participating postsecondary institution and the local board of education.

Service Members Opportunity College (SOC)

Drake State is a member of the Service Members Opportunity College (SOC). As a SOC institution, we serve the higher educational needs of the members of the active military services. These units include the Army, Army National Guard, Navy, and the Marine Corps. As a SOC institution we are able to enroll active military personnel as students and assist them in earning an Associate's Degree.

Education opportunities are shared in two components:

A. A degree plan is encouraged and becomes the ongoing requirement of the Associate Degree. Drake State would become the home college for new students who have entered into a student agreement with a previous college.
B. Continuing students are those applicants who have already chosen a home college and have obtained a SOC Agreement. Assistance is given to these students in the selection of required courses to complete their degree plan.

Admission Procedures

1. Obtain General Information packet from Admissions Office.
2. Meet with counselor.
3. Decide on tentative program of study.
4. Meet with program leader/department head.
5. Complete Application Form.
6. File Application Form with Admissions.
7. All admitted students are required to take the Accuplacer placement examination prior to registration for more than three credit hours or six weekly contact hours per semester.
8. Have high school transcript, college transcript, or copy of GED test scores mailed directly to the Admissions Office by the forwarding institution. All eligible male students between the ages of 18 and 26 must verify registration with the U. S. Select Service System.
9. **For ADN Students ONLY**: Pass AND Entrance Test.

10. Students who do not have a high school diploma or GED may enroll in selected programs. However, the student must pass the Ability-To-Benefit test prior to being admitted to the College.
11. For students who will need financial assistance: complete and file Pell Grant Application and request that Financial Aid Transcript be sent from all other postsecondary institutions previously attended. Upon receipt, take the federal Pell Grant Student Aid Report to the Financial Aid Officer at Drake State.
12. For JTPA, Rehabilitation, and other students sponsored by an outside agency ONLY: have sponsoring agency send Training Authorization Form to the business office.
13. For Veterans ONLY: bring DD-214, marriage license and birth certificates of all dependent children to the VA Counselor.
14. For Transfer Students ONLY: have transcripts from secondary technical centers or other postsecondary institutions evaluated for prior credit.
15. For ADN, Cosmetology, and Barbering Students ONLY: submit completed physical examination form to the program chair.
16. **For ADN Students ONLY**: schedule interview with Health Science Department Chair.
17. Receive acceptance letter from admissions.
18. Attend Orientation/Assessment Session scheduled immediately prior to the beginning of registration.

ADMISSION AND REGISTRATION SCHEDULES

Admission Schedule

Students are admitted at the beginning of each academic semesters: fall, spring, summer. All new students should check with the Admission's Office for specific start dates. New students must submit an application and supporting documentations to the Office of Admissions to be eligible for registration of courses.

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iStart Strong New Student Sessions

This program is designed to provide information that will aid a new student in his/her transition to college and to stimulate an excitement for learning. A student is introduced to college policies, procedures, requirements, and services. Each new student must attend an iStart Strong session and register for an Orientation 101 course. A schedule of sessions is published each semester.

Orientation 101 (ORI 101)

Orientation 101 is a course requirement of all Drake State students. A student can waive the course requirement if he/she attended another institution and completed at least 12 semester credit hours.

Registration Schedule

Registration is scheduled at the beginning of each semester. Late registration is scheduled immediately following the registration period. Students registering during late registration must pay a late fee of $25.00 in addition to all other fees.

TUITION POLICIES

Residency status must be determined upon admission. Applicants must first satisfy the admission requirements to the college. In determining resident student status for the purpose of charging tuition, the burden of proof lies with the applicant for admission. The institution may request proof that the applicant meets the stipulations for admission.

In-State Tuition

In order to be eligible for in-state tuition, an applicant must meet one of the following criteria:

A. Determination of eligibility for in-state tuition shall be made by the Office of Admissions by evaluating the presence or absence of connections with the state of Alabama.
B. The student is eligible for in state tuition if he or she resides in the adjacent state of Tennessee in the following counties: Bedford, Coffee, Franklin, Giles, Lawrence, Lincoln, Marion, Marshall, or Moore.

Out-of-State Tuition

Any applicant for admission who does not fall into one of the categories noted above shall be charged a minimum tuition of two times the resident tuition rate charged by that institution.
Students initially classified as ineligible for resident tuition will retain that classification for tuition purposes until they provide documentation that they have qualified for resident tuition.
An out-of-state student cannot attain Resident Status simply by attending school for twelve months in the State of Alabama.

PROVISIONAL ENROLLMENT

Students will be advised at the time of registration that if private third-party agencies have not been paid by the end of the registration period or by the 30-calendar day extension, the student will be responsible for payment of tuition and fees immediately. If payment is not rendered immediately, the student will be administratively withdrawn.
The College will provide a disclaimer statement informing the student of these terms and conditions to be signed by the student during registration. The student must be at least 18 years of age to negotiate terms; if not, a responsible adult must sign.

Veteran Tuition Policy – Post 9/11 GI BILL and Veteran Vocational Rehabilitation
In compliance of US USC 3679(e) PL 115-407, Section 103

J.F. Drake State Community and Technical College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement funding from VA under chapter 31 or 33. Students will be responsible for any assessment of tuition and fees beyond the entitlement amount due from the Department of Veteran Affairs. Assessment of late fees will be applicable for late registrations as indicated on the current year academic calendar and guidelines indicated within the current year college catalog.

ASSESSMENT AND PLACEMENT

Placement Policy

Drake State Testing and Assessment Center is located in Building 700 room 705. The testing center is open Monday through Friday and accepts walk-ins and appointments. All entering students are assessed through a 3-level screening guideline process.

- **Screening Level 1:** This level is the first level and determines placement via an ACT score that is not older than 5 years. All screening must begin here. See Level 1 chart for more information.
- **Screening Level 2.** This level is the second level of screening and only takes place if a student does not meet eligibility under (Level 1). Level 2 determines placement via a review of the high school GPA and English and math course grades. See Level 2 chart for more information.
- **Screening Level 3:** This level is the third level of screening and should only be utilized when a student is not eligible under Level 1 and Level 2 screening. Level 3 determines placement via Accuplacer scores. See Level 3 chart f0or more information.

English

- Placement into ENG 101
  - ACT English sub-score of 18 or above, or
  - HS GPA of 2.75 or higher and A or B grade in English IV, or
  - WritePlacer (Accuplacer) score of 5
- Placement into ENG 101 and ENG 099
  - ACT English sub-score of 17, or
  - HS GPA of 2.75 or higher AND grade of C in English IV, or
  - WritePlacer (Accuplacer) score of 4, or
- Placement into ENR 098
  - WritePlacer (Accuplacer) score of 3 or below

Mathematics

- Math Placement based on ACT math sub-score of 20 or higher – See Math Placement Guidelines Chart
- Placement into MTH 100 or MTH 110/MTH 109 or MTH 112/MTH 111
  - ACT math sub-score of 18 or 19, or
  - HS GPA of 2.75 or higher and A or B grade in Algebra II, or
  - Accuplacer Next Generation Math (QAS) score of 253-266 for MTH 100
  - Accuplacer Next Generation Math (QAS) score of 267-300 for MTH 110 or 112
- Placement into MTH 100 and MTH 099
  - ACT math sub-score of 17, or
  - HS GPA of 2.75 or higher and C in Algebra II, or
  - Accuplacer Next Generation Math (QAS) score of 243-252
- Placement into MTH 098
  - Accuplacer Next Generation Math (QAS) score of 200-242

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

Drake State protects the security, confidentiality, and integrity of student records.

Drake State shall not permit access to or the release of education records or personally identifiable information contained therein, other than directory information as defined with the paragraph titled "Directory Information," without the written consent of the student, to any party other than the following:

1. Other school officials and teachers of the college who have been determined by the college to have legitimate educational interests;
2. Officials of those schools or school systems in which the student seeks or intends to enroll, upon the condition that the student may receive a copy of the record if desired, and have an opportunity for a hearing to challenge the content of the record;
3. Certain authorized representatives of federal departments/agencies or state educational authorities for purposes of audits, evaluative studies, etc. Data collected will be protected in a way that prevents personal identification except when specifically authorized by federal law. The data will be destroyed when no longer needed for such purposes in connection with a student's application for, or receipt of, financial aid;
4. State and local officials or authorities to which such information is specifically required to be reported or disclosed pursuant to state statute adopted prior to November 19, 1974;
5. Organizations conducting studies for, or on behalf of, educational agencies or institutions for the purpose of developing, validating, or administering predictive tests, administering student aid programs and improving instruction, provided such studies do not permit the personal identification of students to be released to persons other than representatives of said organizations and providing that such information will be destroyed when no longer needed;
6. Accrediting organizations in order to carry out their accrediting functions; and
7. Pursuant to a lawful subpoena or court order; other appropriate persons in an emergency to protect the health or safety of the student or others.

DIRECTORY INFORMATION

The following information with respect to each student has been designated by the College as directory information, which may be made available to the public, absent a student's request that any such information not be released:

A. Student's name, address, telephone number
B. Dates of attendance
C. Educational agencies or institutions most recently attended by the student
D. Program of study, degree desired, and classification
E. Participation in officially recognized activities, clubs, and organizations; and
F. Degrees and awards received.

If any student has an objection to any of the aforementioned information being released during any given semester or academic year, the student should notify, in writing, the Director of Admissions/Registrar during the first three weeks of the respective semester or academic year.

DROPPING AND ADDING CLASSES

Adding classes to a student's schedule is permitted during the registration period. All changes must be made prior to the deadlines published in the College calendar.

CHANGE OF MAJOR

Students who wish to change their major must complete a Change of Major form and submit to the Admissions Office in order to facilitate the change. Changes requested after the start of the current term will be effective at the start of the following term.

WITHDRAWAL FROM SCHOOL

Students who are contemplating withdrawal from school should use the following procedure:

1. Obtain a Withdrawal Form from Admissions.
2. Obtain withdrawal clearance from the financial aid office, if applicable.
3. Submit the completed class withdrawal form to the Office of Admissions for processing. If the withdrawal from school is prior to the 15th school day, the student may be due a tuition refund (see Refund Policy under the Financial Information section of the catalog). It is the responsibility of the student to ensure notification of withdrawal is received by the Office of Admissions prior to the deadline published in the college calendar. Failure to submit the completed withdrawal form to Admissions may result in a grade of "F" for each course in which the student is registered. Students who withdraw after the registration period will have each of their courses recorded as "W". "W's" are not used in grade point calculations. Any veteran who withdraws from school may be required to repay in full to the Veteran Administration benefits received that semester up to the time of withdrawal. Any student who receives Financial Assistance should notify the Financial Aid Office before withdrawing from school.

ACADEMIC TRANSCRIPTS POLICY

The transcript policy of the College includes:

1. In compliance with the Family Educational Rights and Privacy Act (FERPA), the college does not release transcripts of a student's work except upon the student's written and signed request or an electronic request via their Banner Self-Service account.
2. Official transcripts are sent to institutions, companies, agencies, etc. after the student's written and signed request is received by the Admission's Office. Drake State will not fax or email unofficial transcripts to an individual or a receiving institution.
3. Official transcripts that are not released specifically to institutions, companies, agencies, etc. but are issued directly to the student will be stamped ISSUED TO STUDENT. A student should be aware that the receiving party has the right to decline the transcript stamped ISSUED TO STUDENT.
4. All transcripts ordered through Credentialing Solutions are free for the 1st copy and $5.00 per copy thereafter. Transcripts printed in the Office of Admissions will be assessed a fee of $5.00, even if it is the student's first transcript. Transcripts will not be issued for persons who have financial obligations to the College.
5. Name, dates of attendance, A#, and address to which the transcript is to be sent are to be included in the request. **NOTE: Students with name changes should include ALL former names.**
6. The Admissions Office does not issue or reproduce transcripts from other institutions. Requests for transcripts at other institutions must be directed to the institution concerned.

7. Official transcripts will be accepted when hand delivered in a sealed envelope. The college reserves the right to deny hand delivered transcripts if the seal is broken.
8. Transcript requests should be made at least one week before the transcripts are needed. Processing times may be longer at the start and end of the term and if attendance was prior to 1999.
9. Requests for transcripts if attendance was prior to 1999 should be sent to:

The Office of Admissions
J.F. Drake State Community and Technical College
3421 Meridian Street, North
Huntsville, Alabama 35811

ATTENDANCE POLICY

Class attendance is considered essential to the educational process at Drake State. The College subscribes to the philosophy that students will achieve academic success in direct proportion to class attendance. We also subscribe to the belief that the ability to manage one's own attendance and punctuality is a critical component of job readiness that each student must master. With that in mind and since it is not required by our accrediting agency, Drake State is a non-attendance taking institution. Students must develop the ability to manage their time, monitor their attendance, and make their own determination on whether or not to drop from a class. This policy in no way indicates that class attendance is not critical to the student's success; indeed, it is critical to success in the classroom just as it will be critical to success in the workplace.

Individual instructors are granted the flexibility to establish more restrictive attendance policies for their classes. These policies can specify a maximum number of absences, tie the student grades in part to class attendance, or incorporate other methods they deem necessary. Any such policies will be clearly explained as part of the course syllabus provided to each student at the beginning of the instructional term.

Further, some students are receiving educational benefits from various federal and state agencies while attending classes at Drake State. Such agencies, like VA, WIOA, and others, may impose their own attendance policies on students as a condition of receiving those educational benefits. Drake State acknowledges the right of the agencies to do so and is committed to providing them with an accurate accounting of the attendance of their benefit recipients.

Excused absences occur mainly because of emergencies (e.g. accidents, illness, or death of an immediate family member) or a result of federal or state statute (e.g. military service). Both types require proper notification and documentation, as determined by the instructor. When excused absences make it impossible to reasonably make up class work, the student may withdraw according to the College's withdrawal policy.

It is the student's responsibility to keep track of their exact number of absences in each class and to ensure that any missed assignments are completed in a timely manner. The instructor is not required to notify the student when the student is in danger of being excessively absent, nor is the instructor required to review any material missed as a result of the student being absent.

LIVE WORK POLICY

Live work is a paid or contracted service performed by students under real-world working conditions as an integral part of a course of study to enhance their knowledge and skills.

The board authorizes the college to offer live work when the instructional program requires such projects for the acquisition of career and technical skills leading to employment provided it does not compete with private enterprise.

1. Administration

The President of the College is responsible for the administration and control of live work. All live work performed must be approved by the President or a designee identified in writing. The President shall be responsible for maintaining appropriate records and ensuring that the state prescribed and approved accounting procedures are followed.

The Chancellor or Chancellor's designee must be notified in advance of all off-campus live work projects. In addition, the Chancellor must approve requests to build structures on campus for resale that exceed five thousand dollars ($5,000). The College must adhere to state bid laws when providing live work.

2. Live Work

The scope and extent of live work will be well defined in writing before approval. Individuals and organizations requesting live work assume all associated risks. The following individuals and organizations may request live work:

a. Tax supported programs and institutions
b. Active and retired public employees/officials
c. Students in Alabama Community College System institutions
d. Program advisory committee members
e. Charitable organizations
f. The general public when the live work is of a recurring, small-scale nature, such as health and beauty services
g. Other individuals and organizations when the President justify in writing why the live work is necessary for the training program and files a signed copy with the Chancellor or a designated representative

3. The College must document all live work performed during the fiscal year (October 1-September 30) and prepare a Live Work Summary Report for submission to the ACCS Director of Career and Technical Education by October 31.

4. Release of Institution Liability

The person, program, institution, or organization for which live work is done shall:

4.1. Assume all responsibility for the results of the work being done by students;
4.2. Bear all actual costs of materials and parts involved and pay a service charge as follows:

a. The total charges (cost plus a service charge) for live work will be no less than cost plus 10 percent and not more than cost plus 20 percent; in no case shall the total charge be less than $5.00.

b. When a licensed training program, such as health and beauty services, is operated, services may be provided to the public using a schedule of charges established by the President.

c. In exceptional cases such as the construction of a public building or a charitable project, a reduced service charge for the indirect expense of live work may be applied provided the Chancellor or a designee concurs in writing.

d. The College must establish and publish a timeframe for payment and pick up of a completed live work project. Any project not paid for and picked up within the designated timeframe will become property of the College and normal surplus property procedures will apply.

5. Restrictions on Live Work

To avoid competition with private enterprise, live work is restricted as follows:

5.1. Live work will be performed only when it is a related learning outcome of the specific CTE course being offered for skills leading to employment.

5.2. Live work will not be performed when there is any connection with or relation to the making of a financial profit by a program, organization, institution, or individual.

5.3. No person shall use the institution for personal gain or profit.

S.C. O'NEAL SR. LIBRARY AND TECHNOLOGY CENTER

The mission of the S. C. O'Neal Sr. Library and Technology Center is to provide comprehensive and innovative information services to support scholarship, learning and the instructional programs offered by Drake State. The library supports the administration, faculty, staff, students and community clientele by employing traditional resources and current technology to facilitate access to information.

The library also provides state-of-the-art hardware and software programs. The instruction, and training needed to use the equipment and services effectively, along with emerging technologies, promotes and serves as the model for information technology needs of the college. Students have access to books, periodicals, databases, and other electronic resources. The library also offers a variety of technology aids to assist with learning needs.

Library User Behavior Policy

All visitors of the S.C. O'Neal, Sr. Library and Technology Center are expected to follow Drake State's Student Code of Conduct. All visitors should familiarize themselves with the Code of Conduct. A copy of the Code of Conduct can be provided upon request.

Behavioral Expectations

1. Library users are expected to keep noise levels low. Groups working on projects are encouraged to utilize the group study room located on the second floor to engage in discussion without disturbing others in the library.

2. Any behavior that disturbs or endangers others is prohibited. This includes loud noises, misuse of library materials or facilities, or verbal or physical harassment.

3. Cell phones must be turned off or muted. ALL cell phone conversations must be held outside the library.

4. Food and/or drinks are not permitted in the library.

5. Tobacco use is not allowed anywhere on campus.

6. Library users are expected to follow the instructions of the library staff.

7. Children 18 years of age and under must be accompanied by an adult **AT ALL TIMES**, unless they are high school students participating in the College's early enrollment program. Children should **NEVER** be left unattended and are expected to comply with all library policies. Students may not leave their children in the library unattended while they are in class. The library staff is not responsible for the care of children, or for supervising their use of library materials or facilities. Any library materials damaged by a child, will be the responsibility of the parent/guardian. It is the responsibility of the parent/guardian, to make restitution for any materials damaged by the child while on campus.

8. Personal belongings should not be left unattended. The library is not responsible for lost or stolen items. Items that are found will be held at the Circulation Desk for (30) days. Any unclaimed items will be disposed of after (30) days.

Failure to comply with ANY of the rules listed above or Drake State's Code of Conduct may result in the following consequences:

- Disciplinary action by Drake State Community and Technical College
- Expulsion from the building
- Legal action, where applicable
- Loss of access

Drake State Community and Technical College and the S. C. O'Neal, Sr. Library and Technology Center reserve the right to change and/or update this policy at any time.

Resources and Services

The library houses a host of resource materials which support the instructional programs at Drake State Community and Technical College. The overall collection consists of books, industrial and technical manuals, periodicals, software programs, electronic databases and a variety of audio-visual materials and equipment for use on an individual or group basis. Other resources include the vertical file, Black Collection, plus much more.

The library's services consist of access to the Internet and Wi-Fi, the Alabama Virtual Library (AVL), ProQuest Global Newsstream database, photocopying/fax, laminating, and much more. Also available to students are printing and copying services offered at reasonable costs.

Personal Computers

Two open labs are provided in the library for individual use. Students are asked to adhere to the Computer Usage Policy of the college. All students are required to sign the computer log before using all personal computers. As a reminder, priority is given to academic or instructional assignments versus recreational activities.

Borrowing Privileges- Reciprocal Lending Agreements

The S. C. O'Neal, Sr. Library and Technology Center have reciprocal lending agreements with Alabama A&M University, Athens State University, Calhoun Community College, Oakwood University, and the University of Alabama of in Huntsville.

Drake State students are allowed to check out the following number of resources at the reciprocal lending agreement institutions:

Alabama A&M University	5
Athens State University	3
Calhoun Community College	5
Oakwood University	8
University of Alabama in Huntsville	3

Students attending the reciprocal lending agreement institutions are allowed to check out the same number of resources from Drake State Community and Technical College. All students participating in reciprocal lending agreements must provide a valid student ID from their institution and a current address and telephone number.
Practical Nursing students may also use the University of Alabama, Huntsville, Primary Medical Library Facility located near Huntsville Hospital.

Other community members who wish to check out library materials may request a community user account. To open an account, community members must pay a $20 fee and provide a picture ID, proof of address and two phone numbers. The account is valid for two years and membership is renewable. Community users may have two items on loan at one time.

Children wishing to borrow material must have a parent or guardian check out the material for them. The material will be checked out in the parent or guardian's name and the parent or guardian will assume all responsibility for the material including fines and replacements costs if the material is lost or damaged. Fines are $0.10 per day for each overdue item.

The Alabama Virtual Library (AVL)

The Alabama Virtual Library (www.avl.lib.al.us) provides all citizen of the State of Alabama with on-line access to essential library and information resources. The Alabama Virtual Library can be accessed from all computer labs on campus having Internet connections and also from the campus website (www.drakestate.edu) using the library link.

The library is the point of contact for students to register for home access to the Alabama Virtual Library. All students who own personal computers are encouraged to request an AVL card from the Reference desk located on the first floor of the library adjacent to the elevator.

ProQuest Global Newsstream Database

ProQuest Global Newsstream Database searches are a combination of periodical retrieval software and quality information available via the Internet. ProQuest is available on the campus in any computer lab with internet connectivity. ProQuest (www.proquest.com) can also be accessed through Canvas Learning Management System on the library's web page at www.drakestate.edu.

Circulation of Materials

Students with current identification cards may borrow up to ten (10) resources (books and audio-visual materials) from the library for a period of thirty (30) days. Resources are renewable provided there are no "holds" in place for the circulating items. Delinquent materials will incur fines at a rate of ten (10) cents per day.

Hours of Operation

The library staff, upon request, provides instruction, orientation and personal assistance during regular operational hours as follows:

Monday – Thursday: 7:30 a.m. – 7:00 p.m.
Friday – 7:30 a.m. – 11:30 a.m.
Weekends: Closed

These hours are subject to change due to holidays and semester breaks. If you have any questions, email directly to Carla.clift@drakestate.edu or dennis.borden@drakestate.edu or call (256) 551-5207.

COMPUTER AND TECHNOLOGY ACCEPTABLE USE POLICY

Individuals are Fully Responsible for their own actions while using Drake State's (Drake) "computer technology" (defined as Drake computers and computer-related equipment, programs, supplies, and network communications, including Internet access gained through Drake's computer network). Users must respect the privacy and rights of others, and the integrity of both the hardware and software being used. Accordingly, users must assume responsibility for making the best possible use of access privileges and for not abusing them. Employee questions concerning access, acceptable and unacceptable use, should be directed to the Coordinator of IT Services. Student questions should be directed to the appropriate instructor or the Dean of Instruction.
Limited Access: Drake reserves the right to limit the access of any and all employees and students to certain software programs or directories. Each user is provided with a certain access level. A user may not access a computer without authorization or exceed authorized access. A user's activity is restricted to access of only those programs or directories in that user's respective access level. Likewise, a user may not obtain access to another level by means of another user's access. Any user who exceeds their respective level, assists another user to gain access to an otherwise inaccessible level, or allows another user to gain access to an otherwise inaccessible level will be held accountable for the violation of this policy. A user may not continue to enter an access level which was previously assigned to the user but which has since been suspended, revoked, or otherwise continued.
No user may knowingly:

- Use either Drake computer technology or personal technology to "break into" or "hack into" college or other computers and storage devices for the purpose of reading, copying, deleting, modifying or distributing data and/or information of others, or any other purpose;
- Give passwords, access codes or other security level access information to others;
- Share personal or Drake e-mail accounts.

Internet Access: Any employee or student access to the Internet through Drake's computer network is limited to the acceptable use as set out below. Likewise, any employee or student who accesses the Internet through Drake's computer network for an unacceptable use or defined above or causes an unacceptable result will be held accountable for the violation.

The use of the Internet must be in support of education, research, college-related service activities, or college administration and consistent with the mission of Drake State of any material in violation of any federal or state regulation is prohibited. This includes, but is not limited to: copyrighted material, threatening or obscene material, or material protected by trade secret. Any use of the Internet through Drake's computer network for political advertisement or political lobbying is also strictly prohibited. Users of the Internet through Drake's computer network are expected to abide by the rules of network etiquette. Any swearing, vulgarities or other inappropriate language is prohibited. Users are also prohibited from revealing personal addresses or phone numbers of students or colleagues.
Users are hereby warned that electronic mail (e-mail) is not guaranteed to be private. Administrators who maintain the system do have access to all mail. Messages relating to or in support of illegal activities may be reported to the authorities.

Acceptable Use: It is acceptable to use Drake computer technology for purposes relating directly to education, educational research, college-related service activities, and administration of Drake. Examples of acceptable use are:

- Using the software/hardware only in the condition and settings provided by Drake. User may not modify software settings, to add or delete hardware components or modify software features, unless so instructed by appropriate college officials.
- Using the network for the purpose of instructional support. This may include class assignments, research, skill development, and/or the production of materials used in the educational process.

Unacceptable Use: It is unacceptable to use Drake computer technology for any illegal purpose or to interfere with or disrupt other users, services or equipment. Such unacceptable use includes, but is not limited to, the following:

- Engage in activities to damage or disrupt computer, computer system, network information, data or a program by such acts as virus creation and propagation, wasting system resources, or overloading networks with excessive data.
- Engage in activities for the purpose of promoting personal gain and/or profit or use of college technology for organizations other than Drake.
- Engage in any activity which is in violation of the Code of Alabama (1975) §§36-25-1 through 36-25-30, as amended (the "State Ethics Law"), or which, in the opinion of the Drake administration, may be contrary to such law.
- Use of any computer technology in a manner that violates patent protection or license agreements.
- Engage in any activity that violates any and all copyright laws. Such activity may include utilizing Drake technology to copy and/or distribute copyrighted materials of any type that the user does not have a valid and legal right to copy.
- Engage in any use that is illegal or results in the commission of any illegal activity.
- Use Drake computer technology to support or oppose any candidates or candidates for public office, or for any other political purpose. (Use of State property for political purposes is against Alabama law.)
- Transmit messages of a romantic or sexual nature to any person or persons.
- Create, display, transmit or make accessible threatening, racist, sexist, offensive, annoying, or harassing language and/or material.

- Knowingly access or transmit information which contains obscene or indecent material as defined by law.
- Knowingly perform an act, which will interfere with the normal operation or use of computers, terminals, peripherals, or networks.
- Create copies, or take into the user's personal possession copies of Drake owned software and/or hardware technology such as computers, components, disks, or peripherals.
- Using another person's computer account or allowing someone else to use your account (e-mail, secure systems, etc.).
- Share personal or Drake e-mail accounts.
- Masking the identity of an account or machine or in any manner misrepresenting your identity in e-mail or other electronic communication.
- Communicating any information concerning password, identifying code, personal identification number or other confidential information without the permission of its owner.
- Creating, modifying, executing or re-transmitting any computer program or instructions intended to obscure the true identity of the sender of electronic mail or electronic messages, collectively referred to as "Messages," including, but not limited to, forgery or Messages and/or alteration of system and/or user data used to identify the sender of Messages.
- Attempts to gain unauthorized access to any information facility, whether successful or not. This includes running programs that attempt to calculate or guess passwords, or that are designed and crafted to trick other users into disclosing their passwords, and any attempts to circumvent data protection schemes or uncover security loopholes. It also includes electronic eavesdropping or communication facilities.

Access is a Privilege, Not a Right: Drake State reserves the right to deny the privilege of the use of any or all types of computer technology to individuals who violate this Acceptable Use Policy. Users may also be held accountable for violations of Federal and/or Alabama Laws (i.e, Computer-Related Crime, etc.). Violations of this policy may result in the termination or suspension of employment, suspension of computing privileges, disciplinary review, any other forms of employee or student discipline, and/or financial restitution to Drake State for any damages and costs related to inappropriate or unacceptable use, and/or criminal or civil legal action. Drake State reserves the right to modify or clarify this policy at any time.

Computer Crimes: The Alabama Computer Crime Act, codified at Code of Alabama (1975) §§13A-8-101 – 13A-8-103, makes it a crime for a person to damage, or without authorization to modify, computer equipment, computer networks, and computer programs and supplies or without authorization to access, examine, or use computer data and programs, and provides for punishment up to a Class B Felony (imprisonment for 2-20 years and/or a fine up to $10,000 or double the damage or loss to the victim). Federal law also makes it a crime to without authorization access level to computers or computer networks devoted in part to Federal purposes. Any violation of such State or Federal laws respecting computers shall also constitute a violation of the Drake State Computer Technology Acceptable Use Policy. Furthermore, this policy prohibits various actions (described above) which may or may not constitute a crime.

Unacceptable Use

It is not acceptable to use DrakeMail in such a way as to interfere with or disrupt network users, services, or equipment. DrakeMail resources may not be used in the following manner.

A. To generate or facilitate unsolicited commercial e-mail ("spam"). Such activity includes, but is not limited to:
    1. Sending e-mail in violation of the CAN-SPAM Act or any other applicable anti-spam law.
    2. Imitating or impersonating another person or his/her e-mail address.
    3. Sending e-mails to users who have requested to be removed from a mailing list.
    4. Selling, exchanging or distributing to a third party the e-mail addresses of any person without such person's knowledge and continued consent to such disclosure.
    5. Distributing unsolicited e-mails to significant numbers of e-mail addresses belonging to individuals and/or entities with whom you have no pre-existing relationship.
B. To send, upload, distribute or disseminate or offer to do the same with respect to any unlawful, defamatory, harassing, abusive, fraudulent, infringing, obscene, or otherwise objectionable content.
C. To intentionally distribute viruses, worms, defects, Trojan horses, corrupted files, hoaxes, or any other items of destructive or deceptive nature.
D. To conduct or forward pyramid schemes and the like.
E. To transmit content that may be harmful to minors.
F. To impersonate another person (via the use of an e-mail address or otherwise) or otherwise misrepresent yourself or the source of any e-mail.
G. To illegally transmit another's intellectual property or other proprietary information without such owner's or licensor's permission.
H. To use DrakeMail to violate the legal rights (such as rights of privacy and publicity) of others.
I. To promote or encourage illegal activity.
J. To interfere with other DrakeMail users' enjoyment of the service.
K. To conduct commercial activities and other activities conducted for personal gain.
L. To promote religious or political causes or to promote fundraising or lobbying.
M. Solicitations not approved by the College.
N. Vandalism and mischief that incapacitates, compromises, or destroys college resources and/or violates federal and/or state laws.
O. Violating software copyrights and usage licensing agreements.
P. Violating any federal, state, or local law/regulation, or college policy/procedure.

EQUAL OPPORTUNITY IN EDUCATION AND EMPLOYMENT POLICY

J.F. Drake State Community and Technical College is committed to equal opportunities in education and employment. Drake State is an equal opportunity employer. It is the official policy of the Alabama Community College System, that no person shall, on the grounds of race, color, disability, gender, sexual orientation, gender identity and/or expression, religion, creed, national origin, or age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program, activity, or employment.

Drake State complies with nondiscriminatory regulations under Title VII of the Civil Rights Act of 1964, Title IX Educational Amendment of 1972, which prohibits discrimination based on sex; Title IX, Section 106.8, which prohibits sexual harassment; Section 504 of the Rehabilitation Act of 1973, which prohibits violations of the rights of the disabled; and Title VI, which prohibits discrimination based on race, color, or national origin, and the Americans with Disabilities Act (ADA) of 1990, which covers policies for public accommodations for disabled individuals.

Individuals who believe they have been subjected to discrimination prohibited by Titles VI, VII, IX, Section 504, may contact the Dean of Student Service, who is the College's Title IX Coordinator.

HARASSMENT POLICY

Drake State is committed to providing employment and educational environment free of harassment in any form. Employees shall adhere to the highest ethical standards and professionalism and refrain from any form of harassment. Both employees and students shall strive to promote an environment that fosters personal integrity where the worth and dignity of each human being is respected. Any practice or behavior that constitutes harassment shall not be tolerated.

Harassment can be defined as but is not limited to:

- Disturbing conduct which is repetitive;
- Threatening conduct;
- Intimidating conduct;
- Inappropriate or offensive slurs, jokes, language, or other verbal, graphic, or other like conduct;
- Unwelcome sexual advances or requests for sexual favors;
- Assault;
- Repeated contact solicited during non-traditional business hours which may be perceived as harassment by recipient unless it is specifically associated with work related duties.

Employees and students who are found in violation of this policy shall be disciplined as deemed appropriate by the investigating authority. Harassment of employees or students by non-employees is also a violation of this policy.

This policy encourages faculty, students, and employees who believe they have been the victims of harassment, or those who become aware of any harassment, to contact the Senior Personnel Officer (SPO) or the Office of Human Resources (HR) within ten days of when the alleged incident occurred. Any reprisals shall be reported immediately to the SPO or HR. Failure to act, which includes initial investigation, shall be deemed in direct violation of this policy.

Sexual harassment is a form of sex discrimination which is illegal under Title VII of the Civil Rights Act of 1964 for employees and under Title IX of the Education Amendments of 1972 for students. Sexual harassment does not refer to occasional compliments; it refers to behavior of a sexual nature which interferes with the work or education of its victims and their coworkers or fellow students. Sexual harassment may involve the behavior of a person of either sex against a person of the opposite sex or the same sex, and occurs when such behavior constitutes unwelcome sexual advances, unwelcome requests for sexual favors, or other unwelcome verbal or physical conduct of a sexual nature, when perceived by the recipient that:

- submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or educational opportunities
- or submission to or rejection of such conduct is used as the basis for employment or academic decisions affecting that individual
- or such conduct has the purpose or effect of unreasonably interfering with an individual's work or academic performance, or creates an intimidating, hostile, or offensive work or educational environment

Sexual harassment can be verbal, visual, or physical. It can be overt, as in the suggestions that a person could get a higher grade or a raise by submission to sexual advances. The suggestion or advance need not be direct or explicit; it can be implied from the conduct, circumstances, and relationship of the

individuals involved. Sexual harassment can also consist of persistent, unwanted attempts to change a professional or educational relationship to a personal one. Sexual harassment is distinguished from consenting or welcome sexual relationships by the introduction of the elements of coercion; threat; unwelcome sexual advances; unwelcome requests for sexual favors; other unwelcome sexually explicit or suggestively written, verbal, or visual material; or unwelcome physical conduct of a sexual nature. Examples of verbal or physical conduct prohibited within the definition of sexual harassment include, but are not limited to:

- Physical assault
- Direct or implied threats that submission to or rejection of requests for sexual favors will affect a term, condition, or privilege of employment or a student's academic status
- Direct propositions of a sexual nature
- Subtle pressure for sexual activity
- Repeated conduct intended to cause discomfort or humiliation, or both, that includes one or more of the following: comments of a sexual nature, sexually explicit statements, questions, jokes, or anecdotes
- Repeated conduct that would cause discomfort and/or humiliate a reasonable person at whom the conduct was directed that includes one or more of the following:

    1. Touching, patting, pinching, hugging, or brushing against another's body
    2. Commentary of a sexual nature about an individual's body or clothing
    3. Remarks about sexual activity or speculations about previous sexual experience(s)
- Intimidating or demeaning comments to persons of a particular sex, whether sexual or not
- Displaying objects or pictures which are sexual in nature that would create a hostile or offensive employment or educational environment, and serve no educational purpose related to the subject matter being addressed

This policy shall be distributed, communicated and implemented in a manner which provides all interested parties the opportunity to be informed of this policy. A system-wide educational program shall be utilized to assist all members of the community to understand, prevent and combat harassment. Each community and technical college is required to provide annual training related to harassment, including sexual harassment.

STUDENT SUPPORT SERVICES

Student Support Services and Campus Regulations

Drake State provides student support programs, services, and activities consistent with its mission, while promoting student learning and advancing the development of its students. The College is dedicated to the belief that all people should have an equal opportunity to develop and expand their skills and knowledge throughout their lives. The College provides an environment that is conducive to learning, easily accessible, and accommodating to students with a variety of needs. The current student support programs and services confirms that the institution, in context of its mission, promotes student learning and enhances the development of its students.

Refer to the Student Handbook for specific information regarding student support services, student organizations, and other relevant student policies, procedures, and other TRiO campus information.

FINANCIAL INFORMATION

FINANCIAL GENERAL INFORMATION

Students are expected to meet all financial obligations when they become due. The College reserves the right to refuse admission or to terminate any student who fails to promptly meet his/her financial obligations to the College. Tuition and most other fees and expenses are due and payable at the time of registration. All money is handled through the Business Office. Students are expected to meet all financial obligations when due.

Tuition

Tuition is established by the Alabama State Board of Education and is subject to change at its discretion without prior notice.

Tuition and Fees 2020 – 2021

Semester Hours	In-State Tuition	Facility Fee	Technology Fee	Building Fee	Reserve Fee	Total
1	133	9	9	9	1	161
2	266	18	18	18	2	322
3	399	27	27	27	3	483
4	532	36	36	36	4	644
5	665	45	45	45	5	805
6	798	54	54	54	6	966
7	931	63	63	63	7	1127
8	1064	72	72	72	8	1288
9	1197	81	81	81	9	1449
10	1330	90	90	90	10	1610
11	1463	99	99	99	11	1771
12	1596	108	108	108	12	1932
13	1729	117	117	117	13	2093
14	1862	126	126	126	14	2254
15	1995	135	135	135	15	2415
16	2128	144	144	144	16	2576
17	2261	153	153	153	17	2737
18	2394	162	162	162	18	2898
19	2527	171	171	171	19	3059
20	2660	180	180	180	20	3220
21	2793	189	189	189	21	3381
22	2926	198	198	198	22	3542
23	3059	207	207	207	23	3703
24	3192	216	216	216	24	3864

Out of State Tuition and Fees

Out-of-state tuition is equal to two times the in-state amount for tuition. All other fees remain the same. Students who apply for admission and reside in the Tennessee Counties which border Madison County, Alabama are extended in-state tuition. The state of Alabama requires proof of residency for twelve consecutive months in order to qualify for in-state tuition.

Veteran In-State Tuition PL115-251

The following individuals shall be charged a rate of tuition not to exceed the in-state rate for tuition and fees purposes:

- A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill – Active Duty Program) or chapter 33 (Post-9/11 G.I. Bill), of title 38, United States Code, who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.

- Anyone using transferred Post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active duty service of 90 days or more.

- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three-year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.

- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence).

- Anyone using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.

- Anyone using educational assistance under chapter 31, Vocational Rehabilitation/Employment (VR&E), also be charged the resident rate. Effective for courses and terms beginning **after March 1, 2019**, a public institution of higher learning must charge the resident rate to chapter 31 participants, as well as the other categories of individuals described above. When an institution charges these individuals more than the rate for resident students, VA is required to disapprove programs of education sponsored by VA.

Mandatory Fees

Facility renewal:	$9.00 Per Credit Hour
Instructional Technology:	$9.00 Per Credit Hour
Reserve:	$1.00 Per Credit Hour

Building:	$9.00 Per Credit Hour
Graduation:	$159.00
Complete Withdrawal:	Lesser of 5% of tuition & fees, or $100.00

Online or Hybrid Courses

Tuition for online and hybrid course follow the same fee schedule as above.

Fees are not charged for the following services:

- Application
- ID Card
- Transcript
- Parking
- Drop-Add

Punitive Fees

Late Registration:	$25.00
Overdue Library Book:	$0.10 per Book, Per Day

Each program has additional charges for books, uniforms, tools, equipment, certification tests, licenses, etc., which are unique to the program. Specific information on additional expenses associated with a program of study may be obtained from an instructor and/or department head/program leader.

The Business Office accepts cash, money orders, cashier checks, VISA, Master Card, American Express, and personal checks.

Financial Regulations

Students are required to pay tuition and fees in full upon registration. Students eligible for Title IV Student Financial Aid, grants and scholarships must pay their remaining amount due after aid has been applied, in order to complete their financial registration. Students may enroll with written authorization from sponsoring agencies. If the third-party sponsors have not paid the College within 30 days from the first day of the term, the student will be required to pay any outstanding balance or be subject to removal from classes. Students who add courses during the drop/add period must pay any additional balance due at the time the courses are added or be subject to removal from classes.

BOOKSTORE

Students may purchase books, kits, supplies from the College's online bookstore. The online bookstore also stocks merchandise with the College name and seal.

WITHDRAWAL

Partial Withdrawal

Students who drop a class during the regular drop/add period, but do not completely withdraw from the College, will be refunded the difference in the tuition paid and the tuition rate applicable to the reduced number of hours including fees appropriate to the classes dropped. There is no refund due to a student who partially withdraws after the official drop/add period. Student financial aid may be reduced based on a partial withdrawal which will require a recalculation of the financial aid benefit. Students are required to pay any resulting outstanding balance from a partial withdrawal which will require a recalculation of their financial aid benefit.

Complete Withdrawal

Students who officially withdraw from all classes for which they registered before the first day of class will be refunded the total tuition and other refundable fees, less an administrative fee of 5% of tuition and fees.

Students who officially withdraw completely after the first day of classes but prior to the end of the third week of classes will be refunded according to the official withdrawal date, as follows:

Refund Schedule

Withdrawal before Classes Begin:

100% of tuition and fees.

Withdrawal during the First Week (Day 1-5):

70% of tuition and fees.

Withdrawal during the Second Week (Day 6-10):

45% of tuition and fees.

Withdrawal during the Third Week (Day 11-15):

20% of tuition and fees.

No refunds will be made in case of withdrawal after 15 days of classes.

Veterans Benefit Refund Policy

The U.S. Department of Veterans Affairs requires all changes of enrollment to be certified within 30 days of action. For VA purposes, the effective date is the date the student withdrew or dropped the class. The U.S. Department of Veterans Affairs will process the information regarding change of enrollment and may establish a debt on the student, based on the effective date of the change. It is the responsibility of the student to satisfy any debt established on the student by the VA.

Students withdrawing from all classes in a semester will have the current and any future certifications terminated. If the student completely withdraws on or before the first day of the term, Drake State will return the tuition and fees payment received, directly to the VA, upon receipt of school debt letter. If the date of complete withdrawal is after the first day of the term, any credit balances that result from a refund of institutional charges will be issued to the student within 40 days from the date a credit balance is created on the Veteran student's account.

Financial Aid Refunds

All student refunds will be available 14 days after the published disbursement date. The disbursement date is the date that financial aid is applied to student accounts to be used to pay fees, tuition and other authorized charges. This date is published on student's self-service banner account.

Student Financial Services

Drake State believes that every qualified student with the desire to attend the institution should have the opportunity to do so. Financial aid is available from a variety of sources, such as the Federal Pell Grant Program and the Alabama State Grant Program. Thus, financial aid in the form of scholarships, grants, and work-study is available to students who meet the criteria for such aid.

Application Procedures

In order to determine eligibility for federal financial aid programs, the student should complete the Free Application for Federal Student Aid (FAFSA). The FAFSA form may be completed online at the U. S. Department of Education's website (www.fafsa.ed.gov). The student should list **Drake State's school code (005260)** in the section requesting the name of the college that he/she plans to attend.

Within one to two weeks after the FAFSA has been filed, the student will receive a Student Aid Report (SAR). Drake State will also receive an electronic copy if s/he has listed Drake State. The Financial Aid Office at Drake State is responsible for verifying that students meet all of the Department of Education's eligibility criteria. The student may also be asked to supply documents (tax transcripts from the IRS, wage and income transcripts, verification forms, etc.) to check the accuracy of the information reported in the SAR. If an error is found, the SAR must be returned to the processor for corrections.

Student Eligibility

Policies that govern student eligibility are established by both the U. S. Department of Education and the post-secondary institution. The federal policies are the same regardless of the institution one attends, but the institutional policies may vary.

Students must meet the following eligibility criteria in order to receive federal financial aid:

A. Have financial need;
B. Have a high school diploma or GED;
C. Be enrolled as a regular student in an eligible program;
D. Be a U. S. Citizen or eligible noncitizen;
E. Have a social security number;
F. Be making satisfactory academic progress;
G. Be registered with Selective Service, if required;
H. Not be in default on any loan or owe a refund on any grant made at any institution under Title IV of the Higher Education Act of 1965, as amended.

The amount of financial aid a student is eligible to receive is based on the Expected Family Contribution (EFC) assigned by the U. S. Department of Education, the cost of attendance at Drake State, the student's enrollment status, whether the student is enrolled in a certificate or associate degree program and other information provided by the student.

Financial Aid Programs

Federal Pell Grants are federal funds, available to undergraduate students who have not earned a Bachelor's or professional degree. These funds do not have to be repaid, unless the student withdraws or drops out of school. The amount will vary each term based on the student's enrollment status (full-time, three-quarter time, half time or less than half time). Any Pell funds not used in the fall and spring terms will be carried over into the summer term. Students must reapply for Federal Pell Grants each academic year.

Federal Supplemental Educational Opportunity Grant (SEOG)

This grant is awarded to Pell Grant students with the lowest Expected Family Contribution (EFC) and does not have to be repaid, unless the student withdraws or drops out of college. Federal funds are allotted to the College to award to students with exceptional financial need. The funds are awarded on

a first come, first served basis. If the student fails to attend classes and the award drops off his/her account, the grant will be redistributed to other eligible students.

Federal Work-Study (FWS)

This is a program that allows students to earn funds for their education. The current pay rate is $7.54 per hour (subject to change) and is limited to a maximum of 19 hours per week. All eligible students indicating an interest in FWS will be considered for these limited funds by completing a work-study application located in the Financial Aid Office. Most job placements are on campus and work hours are usually after classes each day. Hiring is competitive and all interested students may not be able to be accommodated.

Other Types of Assistance

Institutional Scholarships are awarded on a competitive basis to applicants. **PRIORITY DEADLINES ARE ESTABLISHED EACH SEMESTER AND ARE POSTED ON THE COLLEGE'S WEBSITE AS WELL AS THE FINANCIAL AID OFFICE.** Most scholarships are used to recruit top quality students from local high schools but are also available to returning students. The two types of institutional scholarships awarded by the college are academic and leadership.

Academic scholarship recipients must have and maintain a 3.0 or better GPA on a 4.0 scale and maintain a full-time enrollment status. These scholarships cover the cost of tuition and mandatory fees and are renewed each enrollment status, whether the student is enrolled in a certificate or associate degree program. Scholarship recipients are required to sign a contract outlining the requirements for maintaining eligibility.

Leadership scholarship recipients must have and maintain a 2.5 or better GPA on a 4.0 scale and maintain a full-time enrollment status. These scholarships cover 50% of tuition and mandatory fees and renewed each enrollment status, whether the student is enrolled in a certificate or associate degree program. Scholarship recipients are required to sign a contract outlining the requirements for maintaining eligibility.

Vocational Rehabilitation Students with documented disabilities who have been awarded funds for training by the state may see a Financial Aid Counselor to have their award entered into the system for processing.

Employer Educational Assistance Students whose employers provide educational benefits must provide documentation of this benefit from his/her company to a Financial Aid Counselor to be entered into the system for processing.

Verification Policy

Students may be selected on a random basis by the federal government or the Financial Aid Office to verify the following items: (1) family income, (2) taxes paid, (3) family size, (4) number of family members other than parents attending a postsecondary institution, and (5) any other item identified by the Office of Financial Aid. Failure to submit the requested documentation will cause the student to forfeit entitlement to financial aid. Students needing to correct their Student Aid Reports (SAR) as a result of verification will be notified at the time of verification or shortly thereafter by mail, email or phone.

Awarding Policy

Students must have completed all required financial aid forms prior to the first day of the semester to avoid having to pay the initial cost of tuition, fees, books, and supplies themselves. Financial aid forms and materials submitted after the beginning of the semester will be processed as quickly as possible. Because FSEOG funds are limited, these funds are awarded on a need basis until funds are exhausted. Federal Work Study is awarded on an ongoing basis to eligible students with interest in, and the skills required for the job assignment.

Please Note: If a student's schedule includes a mini-term course that begins midterm, the amount of the Pell Grant award may change when the mini-term begins. The Office of Financial Aid may be contacted to determine if there will be an adjustment to the Pell Grant award.

Dependent/Independent Policy

The Federal Government has identified, for student financial assistance programs, certain categories of students who must be considered Independent financial aid applicants. A student is considered an independent financial aid applicant if s/he meets one of the following criteria:

A. Must be 24 years of age prior to January 1 of the application year;
B. Is a veteran of the U.S. Armed Forces;
C. Is on active duty in the U.S. Armed forces;
D. Is an orphan or ward of the court;
E. Is/was emancipated minor;
F. Is/was in legal guardianship;
G. Has a legal dependent other than a spouse;
H. Is a married student;
I. Is a homeless child/youth;
J. Is determined homeless by HUD;
K. At risk for homelessness;
L. Is working on a masters/doctoral program;
M. Has a child/children who receive more than half of their support from you.

An Independent financial aid applicant is not required to submit parental information in the application process. However, if the independent applicant is married, spousal information must be reported.

A student who cannot meet at least one of the criteria is considered a dependent applicant and must provide parental information in the application process.

Special Circumstances

Eligibility is normally based upon the prior year's income. Under certain circumstances, however, eligibility may be based on the current year's income. Death of a parent or a spouse, separation or divorce of a parent or a spouse, loss of income due to natural disaster, or unemployment would allow students to file for special conditions and base eligibility on the current year's income. A student with one of these conditions should contact the Director of Financial Aid.

Disbursement Information

Federal Pell Grant: Pell Grant awards are based on the federal methodology from the information listed on your FAFSA application. Awards are subject to change if a student is selected for verification, enrolled in a program that does not lead to an Associates' Degree, enrolled less than full-time or fails to maintain satisfactory academic progress according to institutional policies. Recipients may charge tuition and fees to their Federal Pell Grant account. Students with small entitlements will be required to pay the difference. Remaining balance checks will be disbursed 14 days after the published disbursement date. Students enrolled in mini-session courses or courses with a late start date may not be eligible to receive a check or may receive miscellaneous balance checks based on actual enrollment hours for the first mini-session with additional funds being released after the second session begins. Students may call or come by the Financial Aid Office to inquire about their eligibility. Students who make a change in their course schedule (See Return of Title IV Funds Policy for additional information) or whose financial aid file is completed during the first two weeks of the semester will be mailed a check approximately two weeks after the first disbursement of checks. After the initial disbursement, checks will be processed every other week.

Federal Supplemental Educational Opportunity Grant (FSEOG): The FSEOG checks will be processed and mailed to students approximately four (4) weeks after the official Drop/Add period ends.

Alabama State Grant (ASG): The ASG checks will be processed and mailed upon receipt of funds from the Alabama Commission on Higher Education in Montgomery.

Federal College Work Study: Time sheets are due in the Financial Aid Office on the 1st day of each month unless otherwise notified. Timesheets turned in after this date will receive payment the following month. Payroll disbursements are made on the 15th day of each month through direct deposit.

Scholarships: Recipients may charge tuition and mandatory fees to their scholarship account. Scholarships do not pay for repeated courses or books.

Satisfactory Academic Progress

Students must declare a major and be working toward the completion of that major in order to receive financial aid. In order to receive aid, a student must be making satisfactory academic progress (SAP) regardless of whether he or she has previously received aid.

Satisfactory Academic Progress (SAP) will be measured at the end of each semester of enrollment after grades have been posted at J.F. Drake State Community and Technical College. Students are required under federal regulations to maintain certain standards of progress depending on the number of hours they have attempted in college. It is the student's responsibility to read and understand all policies associated with financial aid funding.

SAP includes three basic components: qualitative Grade Point Average (GPA), quantitative Hours Completed (completion rate), and timeframe.

The GPA is computed based on a 4.0 scale, with a 2.0 or higher GPA required for graduation.

GPA requirements for long-term certificate and degree seeking students

- If student has attempted 0-21 hours, they must maintain a 1.5 GPA
- If student has attempted 22-32 hours, they must maintain a 1.75 GPA

- If student has attempted 33 or more hours, they must maintain a 2.0 GPA

GPA requirement for short-term certificate (24 – 29 credit hours)

- If student has attempted 0-12 hours, they must maintain a 1.5 GPA
- If student has attempted 13 or more hours, they must maintain a 2.0 GPA

The completion rate is calculated by dividing the cumulative number of credit hours the student has successfully completed by the cumulative number of credit hours the student has attempted.

Completion rate (attempted hours) required by long-term certificates and degree seeking students

- If student has attempted 0-21 hours, they must maintain a 58% completion rate.
- If student has attempted 22-32 hours, they must maintain a 62% completion rate.
- If student has attempted 33 or more hours, they must maintain a 67% completion rate.

Completion rate (attempted hours) required by short-term certificate (24-29 credit hours).

- If student has attempted 0-12 hours, they must maintain a 58% completion rate.
- If student has attempted 13 or more hours they must maintain a 67% completion rate.

Federal regulations require that students must complete their educational objective within a maximum time frame of one and one-half times the length of the program in which they are enrolled, since the purpose of the Federal Title IV financial aid programs is to assist students in meeting their educational expenses while they progress toward timely completion of their educational objectives.

- A student is only allowed 150% of the respective program length to complete the degree or certificate.
- For example, a degree-seeking student can attend Drake State three years, which is 150% of a two-year major.
- Failure to complete within allotted timeframe will result in loss of eligibility.
- All hours attempted, as well as transfer hours accepted, will be included in the maximum timeframe calculation. (ex: course forgiveness, academic bankruptcy, developmental, and incompletes)
- A change in major or academic program does not reset the 150%.

Additional regulations relating to SAP include the following:

- If a student does not meet any of the requirements listed he/she will be given one warning semester to attempt to get back in good standing in which he/she will be eligible to receive aid.
- After attending one warning semester, the student must have the required GPA and completion rate to continue receiving financial aid assistance.
- If a student loses eligibility, he/she may appeal----given student has mitigating circumstances that caused unsuccessful coursework. If appeal is approved by appeals committee then the student will be granted one additional probation semester to establish satisfactory academic progress. If student is not granted a probationary semester, then the student must be a cash paying student until satisfactory academic progress is achieved. At that point, the student could re-establish eligibility.
- Additional information as to the treatment of repeated, incompletes, withdrawals, transfer credit, academic bankruptcy, course forgiveness, and transitional (remedial) classes is as follows:
    - Repeat classes will be factored into the GPA, completion rate, and maximum timeframe calculations. In addition, a student can only repeat a successfully-passed class utilizing federal aid once. Unsuccessful transitional (remedial) courses can only be repeated for a maximum of 30 credit hours utilizing federal aid.
    - Incompletes will be factored into the GPA, completion rate, and maximum timeframe calculations. Incomplete (I grade) coursework must be completed by the end of the next term. At the end of the next term, all unfinished coursework will be calculated as an F.
    - Withdrawals will not be factored into the GPA calculations but will be included in the completion rate and maximum timeframe calculations.
    - Transfer credits will not be factored into the GPA calculation but will be included in the completion rate and maximum timeframe calculations. Only passed classes designated as a “C” or higher will be transferred in from other accredited institutions.
    - Bankrupted (Academic Bankruptcy) classes will be factored into the GPA, completion rate, and maximum timeframe calculation.
    - Forgiven (Course Forgiveness) classes will be factored into the GPA, completion rate, and maximum timeframe calculations.
    - Transitional (remedial) classes will be factored into the GPA, completion rate, and maximum timeframe calculations.
    - After a grade change (except an Incomplete) has been instituted for a prior term, SAP will be recalculated at that time. When an

Incomplete grade is updated to a final grade, it will be factored into the SAP calculation at the time of the next formal evaluation.

- Dropped courses during the add/drop period will not be factored into GPA, completion rate, or maximum timeframe calculations.
- In some cases, a student who is not meeting SAP may regain eligibility for Title IV aid. Options may include a) paying for classes or b) successfully appealing.
- The lifetime eligibility for receiving federal financial aid is 12 full-time semesters which equals 600%. A student's percentage used can be viewed on NSLDS and compared to the Banner form RNASL19. (If student has less than full-time enrollment, the percentage will be prorated).

Information regarding financial aid appeals include the following:

- A student may submit a Financial Aid Appeal if he/she can provide documented proof of mitigating circumstances. Mitigating circumstances are those that are beyond the student's control. If student files an appeal due to exceeding the MAX timeframe, he/she must be meeting other two components of the SAP calculation (GPA and pace), to be considered being placed on an academic plan.
- A student must submit the appeal and all documentation pertaining to the appeal, by the published appeal deadline. Submitting a Financial Aid Appeal is NOT an automatic approval.
    - Appeal Form
- The Financial Aid Appeals Committee will meet each semester to consider completed appeals. The decision of the Appeals Committee is final. Only one appeal per academic year will be considered.
- A student will be notified of the decision made by the Committee by email. Students may check Self Service Banner for academic progress status.
- A student must follow the terms of his/her appeal if approved or lose financial aid eligibility.
- An academic plan may be instituted for a student as an opportunity to restore the student to proper Satisfactory Academic Progress at a specified future point in time. The plan can be voided if the student changes majors or does not follow the prescribed academic plan. This plan is used specifically for students that exceeded MAX time frame and granted an appeal.

Satisfactory Academic Progress for students utilizing veteran educational benefits:

Public Law 114-315 Section 404: Academic Progress and Outcome Measures

In accordance with 38 CFR 668.34, Service Members, Veterans, and/or eligible dependents meeting the eligibility criteria and receiving Department of Veteran Affairs Education Benefits are required to maintain satisfactory academic progress. Academic progress is based on the quantitative and qualitative requirements of degree, certificate, and learning programs of the educational institutions of which Service Members, Veterans, and/or eligible dependents are enrolled within at that educational institution in an Academic Calendar year.

Return of Title IV Funds When a Student Withdraws

Withdrawal - Federal Policy

A student is not entitled to 100 percent of his/her federal grant(s) until s/he has completed 60% of the semester. In most cases, the student would have received 100 percent of his/her grant before that time. Therefore, if a student receives a federal grant and withdraws before 60 percent of the term has passed, s/he will likely owe a portion of the grant back to the Pell grant program.

Complete Withdrawal

A student who withdraws completely before completing 60% percent of any given term may be required to return a portion of the Title IV financial aid grants he/she received (excluding Federal Work-Study wages).

The amount to be returned is based on the concept of "earned" and "unearned" federal financial aid. The percentage of time enrolled determines the percentage of earned aid. For example: If a student attends through the first 25 days of a 100-day term, the percentage of earned aid is 25 percent. The remaining 75 percent of the aid received is therefore unearned and must be returned to the federal financial aid programs.

In some circumstances, a student may be required to repay a portion of the unearned aid received. Each student who owes a repayment will be notified in writing of the requirement to repay Title IV funds. If a student owes a prior balance for the previous year, s/he may use up to $200 of the new year's award to pay the past balance.

If s/he fails to repay unearned Title IV funds, his/her eligibility for federal financial aid will be terminated.

The requirements to return federal financial aid are separate from the College's refund policy. Therefore, a student may still owe funds to the College to cover unpaid institutional charges. The College may also charge you for any federal financial aid program funds that were required to be returned.

If a student completely withdraws after completing 60 percent of the term, no repayment is required as s/he is considered to have earned 100 percent of his/her award for the term.

Any grant money a student has to repay is considered a federal overpayment. The student must either repay that amount in full or make satisfactory arrangements with either Drake State or the Department of Education to repay the amount.

The repayment or arrangements for the repayment must be made within 45 days of the date the student is notified of the overpayment or the student will lose further eligibility for all federal aid for attendance at any college until the debt is paid in full.

The withdrawal may cause him/her to be placed on financial aid probation because he/she has not met the Satisfactory Academic Progress requirements of completing 2/3 of all classes attempted.

Unofficial Withdrawal

A student who stops attending all of his/her classes before 60% of the term is completed without completing a withdrawal form or notifying his instructors of his intent to return to classes will automatically be classified as a failure to pass due to attendance and will be reported to the Department of Education. S/He may then be required to repay a portion of the aid s/he has received based on a midpoint date used as the date of determination. This will also cause him/her to be placed on financial aid probation because s/he has not met the Satisfactory Academic Progress requirements of completing 2/3 of all classes attempted.

VETERANS AFFAIRS

The Veterans Affairs representative is located in the Financial Aid office. The Office of Veterans Services is responsible for providing assistance to Veterans, active duty military personnel, and dependents of Veterans enrolled at Drake State.

Services available include:

A. Referral services;
B. General and specific information regarding available benefits;
C. Assistance in filing claims for such benefits;
D. Reporting of enrollment information.

Benefits for veterans include:

A. Montgomery GI Bill (Chapter 30);
B. Post 911 GI Bill (Chapter 33);
C. Montgomery GI Bill – SR (Chapter 1606);
D. Reserve Education Assistance Program (REAP/Chapter 1607);
E. Dependent Educational Assistance (DEA/Chapter 35);
F. Alabama National Guard Education Assistance Program (ANGEAP);
G. Alabama GI Dependent Scholarship;
H. Veterans Vocational Rehabilitation (Chapter 31).

Any student in the Alabama National Guard or Reserve component is responsible for notifying instructors of orders for military leave. S/he will be terminated from all classes, and upon return, a re-entry form will be processed. If the designated time frame for return is not adhered to, the Department of Veterans Affairs will be notified of the termination, and all educational payments will cease. If a Veteran terminates educational training before the end of a term, the VA will determine liability for repayment of benefits.

A veteran receiving VA benefits is required to pre-register for classes. Failure to meet this requirement may result in termination or delay of monthly benefits. It is the student's responsibility to notify the College's VA representative of any change in enrollment.

ACADEMIC POLICIES

GRADES AND STANDARDS OF ACADEMIC PROGRESS

Grades for Courses Creditable Toward Graduation (Based on 4.00 Scale)

To be eligible for graduation, a student must earn a 2.00 cumulative GPA in all courses attempted at the College. The calculation of the GPA for graduation does not include grades earned in institutional credit courses. A course may be counted only once for purposes of meeting graduation requirements. The GPA is calculated based on quality points earned as defined in the table below:

Grades Quality Points

A - Excellent (90-100 Average)	4 per cr. hr.
B - Good (80-89 Average)	3 per cr. hr.
C - Average (70-79 Average)	2 per cr. hr.
D - Poor (60-69 Average)	1 per cr. hr.
F - Failure (below 60 Average)	0 per cr. hr.

I-Incomplete. The grade of "I" is given when the student fails to complete all of the requirements for a course during the semester. **A grade of "I" can be awarded when a student has completed 75% of their coursework and is unable to complete the course due to documented hardship**. An incomplete form has to be initiated by the student and approved by the instructor and the dean's office before an "I" is granted. A grade of "I" must be removed prior to the end of the following academic semester otherwise the "I" becomes an "F".

W-Withdrawal. The grade of "W" is given when the student withdraws from the course up to the mid-semester withdrawal period. No quality points are awarded for a "W" grade. Course credit hours ARE NOT COUNTED in the cumulative hours for GPA (grade point average) calculation.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS FOR COURSES CREDITABLE TOWARD GRADUATION

Grade Point Average Calculations (GPA)

A student's GPA will be calculated using the following formulas; only courses creditable toward graduation will be included in the computation.

Cumulative GPA=	**Total Quality Points Earned / Total Hours Attempted**
Semester GPA =	Semester Quality Points Earned / Credit Hours Attempted During Semester

The GPA is always expressed as a number between 0.00 and 4.00, and is usually rounded to the nearest 0.01. The following are examples of the relationship between GPA and letter grades:

GPA	Letter Grade
0.00	represents an F average
1.00	represents a D average
2.00	represents a C average
3.00	represents a B average
4.00	represents an A average

Satisfactory Progress Requirements

The following GPA levels must be maintained by the student in order for the student to maintain Clear Academic Status.

1. Students who have attempted 12-21 credit hours at Drake State must maintain a 1.5 cumulative GPA.
2. Students who have attempted 22-32 credit hours at Drake State must maintain a 1.75 cumulative GPA.
3. Students who have attempted 33 or more credit hours at Drake State must maintain a 2.00 cumulative GPA.

Intervention for Students Falling Below Academic Standards of Progress

When a student is placed on Academic Warning, Academic Probation, One Semester Academic Suspension, or One Calendar Year Academic Suspension, College officials may provide intervention for the student by taking steps including, but not limited to, imposing maximum course loads, requiring a study skills course, and/prescribing other specific courses.

STANDARDS OF ACADEMIC PROGRESS AND TRANSFER STUDENTS

1. A transfer student who is admitted on CLEAR academic status is subject to the same standards of academic progress as a "native" student. Grades accrued at other regionally accredited postsecondary institutions are not included in any GPA calculation.
2. A transfer student who is admitted on Academic Probation retains that status until the student has attempted at least 12 credit hours at the institution. If, at the conclusion of the semester in which the student has attempted a total of 12 or more credit hours at Drake State, the Cumulative GPA is below 1.5, the student will be suspended for one semester. The transcript will read SUSPENDED-ONE SEMESTER.
3. If, at the conclusion of the semester in which the transfer student admitted on Academic Probation; the student has attempted a total of 12 or more credit hours at Drake State the cumulative GPA is 1.5 or above, the student's status is clear.

Courses Not Creditable Toward Graduation

Developmental Courses are designed to address academic deficiencies of students as identified by the institution's testing program. Developmental courses have course numbers below 100. These courses are assigned a letter grade of A, B, C, D, or F.

Course Forgiveness Policy

1. If a student repeats a course, the last grade awarded (excluding grades of W and WP) replaces the previous grade in the computation of the cumulative grade point average. The grade point average during the term in which the course was first attempted will not be affected.
2. When a course is repeated more than once, all grades for the course, excluding the first grade – will be employed in computation of the cumulative grade point average. Official records at the institution will list each course in which a student has enrolled.
3. It is the student's responsibility to request of the registrar that the forgiveness policy be implemented.

Academic Bankruptcy

a. A student may request in writing to the Registrar to declare academic bankruptcy under the following conditions:

    i. If fewer than three (3) calendar years have elapsed since the semester/term for which the student wishes to declare academic bankruptcy on all course work taken during that one semester/term provided the student has taken a minimum of 18 semester credit hours of course work at the institution since the bankruptcy semester term occurred. All course work taken, even hours completed satisfactorily during the semester/term for which academic bankruptcy is declared, will be disregarded in the cumulative grade point average.
    ii. If three (3) or more calendar years have elapsed since the most recent semester term for which the student wishes to declare bankruptcy, the student may declare academic bankruptcy, on all course work taken from 1 to 3 semesters provided the student has taken a minimum of 18 semester credit hours of course work at the institution since the bankruptcy semester term occurred. All course work taken, even hours completed satisfactorily during semester/term(s) for which academic bankruptcy is declared, will be disregarded in the cumulative grade point average.

b. When academic bankruptcy is declared, the term "ACADEMIC BANKRUPTCY" will be reflected on the transcript for each semester term affected.
    i. When academic bankruptcy is declared, the transcript will reflect the semester/term of its implementation and the transcripts will be stamped 'ACADEMIC BANKRUPTCY IMPLEMENTED".

c. A student may declare academic bankruptcy only once.

d. Implementation of academic bankruptcy at an institution does not guarantee that other institutions will approve such action. Respective transfer institutions will make this determination.

e. A student who is using Veterans Administration educational benefits must consult the Veteran's Education Representative before applying for academic bankruptcy. Veteran students who apply for and are granted institutional academic bankruptcy are ineligible to recoup any veteran educational benefits previously used for the periods relevant to the academic bankruptcy.

APPLICATION OF STANDARDS OF PROGRESS

Enrollment Status Requirements

1. When the Cumulative GPA is at or above the GPA required for the total number of credit hours attempted at the institution, the student's status is clear.
2. When a student's Cumulative GPA is below the GPA required for the number of credit hours attempted at the institution, the student is placed on Academic Warning. The transcript will read Academic Warning.
3. When the Cumulative GPA of a student on Academic Warning remains below the GPA required for the total number of credit hours attempted at the institution but the Semester GPA is 2.00 or above, the student remains on Academic Warning and shall be noted on the Academic Transcript.
   When the Cumulative GPA of a student who is on Academic Warning remains below the GPA required for the total number of credit hours attempted at the institution but the Semester GPA is below 2.00, the student is placed on Academic Probation. The transcript shall read Academic Probation.
   When the Cumulative GPA is at or above the GPA required for the total number of credit hours attempted at the institution, the student's status is clear.
4. When the Cumulative GPA of a student who is on Academic Probation remains below the GPA required for the total number of credit hours attempted at the institution but the Semester GPA is 2.00 or above, the student remains on Academic Probation with the same notation on the academic transcript.
   When the Cumulative GPA of a student who is on Academic Probation remains below the GPA required for the total number of credit hours attempted at the institution and the Semester GPA is below 2.00, the student is suspended for one semester. The transcript will read SUSPENDED—ONE SEMESTER.
   When the Cumulative GPA of a student who is on Academic Probation remains below the GPA required for the total number of credit hours attempted at the institution and the Semester GPA is below 2.00, the student is suspended for one semester. The transcript will read SUSPENDED—ONE SEMESTER.
   When the Cumulative GPA is at or above the GPA required for the total number of credit hours attempted at the institution, the student's status is clear.
5. The student who is suspended for one semester may appeal. If, after appeal, the student is readmitted without serving the one semester suspension, the transcript will read SUSPENDED—ONE SEMESTER READMITTED UPON APPEAL.
   The student readmitted upon appeal re-enters the institution on Academic Probation.
   The student who serves a one semester academic suspension re-enters the institution on Academic Probation.
6. A student who is on Academic Probation after being suspended for one semester (whether the student has served the suspension or has been readmitted upon appeal) without having since achieved CLEAR academic status and whose Cumulative GPA falls below the level required for the total number of hours attempted at the institution but whose Semester GPA is 2.00 or above will remain on Academic Probation.
   A student who is on Academic Probation, after being suspended for one semester (whether the student served the suspension or was readmitted upon appeal) without having since achieved CLEAR academic status and whose Cumulative GPA remains below the level required for the total number of hours attempted at the institution and whose Semester GPA is below 2.00 will

be suspended for one calendar year. The transcript will read SUSPENDED—ONE YEAR until the student achieves the required GPA.
The student suspended for one calendar year may appeal. If, upon appeal, the student is readmitted, the transcript will read SUSPENDED—ONE YEAR/READMITTED UPON APPEAL. The student who is readmitted upon appeal re-enters the institution on Academic Probation.
The student who serves the calendar year suspension re-enters the institution on Academic Probation.

All applicable academic designations except clear will appear on the student's transcript.

Process of Appeal for Readmission

If a student declares no contest of facts leading to suspension but simply wishes to request consideration for readmission, the student may submit a request in writing for an "appeal for readmission" to the Admissions Committee within six school days of receipt of the notice of suspension. During the meeting of the Admissions Committee, which shall not be considered a "due process" hearing but rather a petition for readmission, the student shall be given an opportunity to present a rationale and/or statement of mitigating circumstances in support of immediate readmission.
The decision of the Admissions Committee, together with the materials presented by the student, shall be placed in the College's official records. Additionally, a copy of the written decision shall be provided to the student. Equity, reasonableness, and consistency are the standards by which such decisions are measured. The Registrar is the contact person to begin the appeal process.

Academic Honors

Selected Academic Honors shall be provided to recognize and promote notable student achievement. Courses carrying grades other than A-F will not be used to calculate the semester GPA nor counted toward the minimum course load requirement for inclusion on these lists.

1. Dean's List - A Dean's List will be compiled at the end of each semester. In order to qualify for the Dean's List a student must maintain a semester GPA between 3.50-3.99 and must be enrolled in a minimum of 12 credit hours of college-level-work.
2. President's List - A President's List will be compiled at the end of each semester. In order to qualify for the President's List a student must attain a semester GPA of 4.00 and must be enrolled in a minimum of 12 credit hours of college-level work.

DEFINITIONS OF TERMS

Drop and Add Period

The three school days immediately following Late Registration are designated for Drop and Add. During this period students may drop or add courses to their schedule after receiving approval from their advisor.

Full-Time Status

A student who is enrolled in 12 or more semester hours of credit courses is considered full-time.

Three-Fourth Time Status

A student who is enrolled in 9, 10, or 11 semester hours of credit courses.

Half-Time Status

A student who is enrolled in 6, 7, or 8 semester hours of credit courses is considered half-time.

Registration Period
Two days at the beginning of each semester when all students should complete the registration process.

Late Registration Period
The two school workdays immediately following the two-day Registration Period. All students who failed to complete the registration process should do so during Late Registration. Students registering during Late Registration will be required to pay a late fee of $25.00 in addition to all other fees. Students will not be allowed to register after late registration without permission from the Dean of Support Services or Dean of Instruction.

Withdrawal Period
The two school days immediately following Drop and Add starts as the regular Withdrawal Period and continues through the mid-semester time frame. During this period students may withdraw from courses and receive a grade of "W". A grade of "W" does not affect a student's GPA standing.

Clear Academic Status
The status of a student whose cumulative GPA is at or above the level required by the policy for the number of credit hours attempted at the institution.

Academic Warning
1. The status of a student whose academic status the previous semester was CLEAR and whose cumulative grade point average falls below the level required by the policy for the total number of credit hours attempted at the institution and whose semester GPA for that semester was below 2.00; or
2. The status of a student who was on Academic Probation the previous semester and whose cumulative GPA for that semester remained below the level required or the total number of credit hours attempted at the institution but whose semester GPA for that semester was 2:00 or above; or
3. The status of a student who has reentered the institution after being suspended for one semester or one year (or after being granted readmission upon appeal).

One Semester Academic Suspension
The status of a student who was on Academic Probation the previous semester but who has never been suspended or who, since suspension, had achieved Clear Academic Status and whose cumulative GPA that semester was below the level required by this policy for the total number of credit hours attempted at the institution and whose semester GPA for that semester was below 2.00.

One Calendar Year Academic Suspension
The status of a student who was on Academic Probation the previous semester, and who had been previously suspended without since having achieved Clear.

GRADUATION REQUIREMENTS

BSS220- Professional Transition

All students must complete BSS220 during the final semester of coursework in the program award for which they intend to graduate. This institutional course provides final preparation for graduation and entry into the new career field chosen by the student. Student must apply for graduation and pay graduation fees to be eligible for graduation.

Associate in Arts, Associate in Science and Associate in Applied Science Degrees

A student shall be awarded the Associate in Arts, Associate in Science, or Associate in Applied Science degree upon satisfactory completion of the requirements of the specific program as specified in the program outline.

A student must:

1. Satisfactorily complete 60-76 semester hours of college credit in an approved program of study, including prescribed general education courses.
2. Earn a 2.00 an overall cumulative GPA in all courses attempted at the College. The calculation of the GPA for graduation shall not include grades earned in institutional credit courses. A course may be counted only once for purposes of meeting graduation requirements.
3. Complete at least 25 percent semester credit hours at the College granting the degree.
4. Be enrolled during the semester in which the degree is earned; or, with approval of the dean of instruction, within a calendar year of the last semester of attendance; or receive the degree by transferring from a regionally accredited institution no more than the last ten hours required for completion of the program with a minimum grade of "C" in the courses transferred. Those students enrolled in linkage programs explicitly approved in writing by the Chancellor who have successfully completed a prescribed program mutually acceptable to the colleges involved are exempted from this requirement.
5. Make sure that the program instructor submits a recommendation for graduation to the Dean of Instruction.
6. Fulfill all financial obligations to the college.
7. Pay the graduation fee to participate in the graduation ceremony.

The Dean of Instruction will review the recommendation for graduation submitted by the program instructor for compliance with school standards. The Dean will either approve or disapprove the recommendations; if disapproved, a reason will be given and corrective action needed by the student will be indicated.

Certificates

A student may be awarded a credential other than a degree upon satisfactory completion of the requirements of the specific program as specified in the program outline.
A student must:

1. Satisfactorily complete an approved program of study.
2. Earn a 2.00 cumulative GPA in all courses attempted at the College. The calculation of the GPA for graduation shall not include grades earned in institutional credit courses. A course may be counted only once for purposes of meeting graduation requirements.
3. Complete at least 50% of the semester credit hours at the College granting the award.
4. Be enrolled during the semester in which the award is earned; or, with approval of the dean of instruction, within a calendar year of the last semester of attendance; or receive the award by transferring from a regionally accredited institution no more than the last ten hours required for completion of the program with a minimum grade of "C" in the courses transferred.
5. Make sure that the program instructor submits a recommendation for graduation to the Dean of Instruction.
6. Fulfill all financial obligations to the college including the payment of the graduation fee.

The Dean of Instruction will review the recommendation for graduation submitted by the program instructor for compliance with school standards. The Dean will either approve or disapprove the recommendations; if disapproved, a reason will be given and corrective action needed by the student will be indicated.

Award of Achievement

Students who complete one or more courses and are not interested in meeting the requirements of higher awards, will qualify for this award which simply indicates completion of the courses taken.
A student must:

1. Complete one or more courses.
2. Request that the registrar issue the "Award of Achievement."
3. Fulfill all financial obligations to the college including payment of the fee for issuing the award.

GRADUATION HONORS

Graduation Honors for Associate Degree Awards

Superior academic achievement by graduating students shall be recognized by the following designations on transcripts:

Designated Honor	GPA
Graduation with Highest Honors (Summa Cum Laude)	3.90 - 4.00
Graduation with High Honors (Magna Cum Laude)	3.70 - 3.89
Graduation with Honors (Cum Laude)	3.50 - 3.69
Graduation Honors for Certificate Awards	
Graduation with Distinction	3.50-4.00

GPA Calculation Procedures for Determining Honor Graduates

Calculation of the GPA for graduation honors shall be identical to that method used to calculate the GPA to fulfill graduation requirements for the degree or certificate being earned. In addition, in order to be eligible for a graduation honor, the student must have completed 32 semester hours at the College conferring the degree or other formal award.

EDUCATIONAL OFFERINGS

Non-Credit Offerings

- Workforce Development
- Adult Education

Credit Offerings

- Educational Programs

Non-Credit Programs

Workforce Development

The College is committed to serving its community as the primary provider of workforce development education and training. Through its Workforce Development Division, the College provides a number of services and programs designed to provide workforce training for employers located in the College's service area. These programs, described in the paragraphs below, include Tech Prep, Training for

Existing Business and Industry, Continuing Education. Workforce development activities of the College include training for area residents to obtain the Alabama Career Readiness Certificate (CRC), the official State of Alabama workforce readiness credential.

Workforce Development is comprised of two major components: (1) **training for existing business and industry**, and (2) **continuing education and adult skills training**, as explained in the following paragraphs.

Training for Existing Business and Industry

Drake State training for existing business and industry program interfaces with local business and industry in establishing courses and programs dedicated to specifically identified community employment and cross-training needs. Local industries are contacted on a regular basis for the purpose of determining their training concerns as well as making them aware of the institution's training capabilities.

Industry partners of the College regularly pursue specialized training to be coordinated and provided by the College utilizing the College's existing training resources. As a result of this interaction with industry, the College is able to assess market demand for the local service area to determine the training that the institution should provide, whether through Training for Existing Business/Industry (TEBI) programs or regular program instruction.

Continuing Education and Adult Skills Training

The Continuing Education and Adult Skills Training programs provide the citizens of North Alabama with flexible, innovative career-technical training at a reasonable cost. The College satisfies the needs and academic pursuits of the community by offering developmental studies, noncredit short-term courses, and continuing education courses to fulfill student needs beyond the normal credit programs offered by the Department of Instruction.

The first Continuing Education classes were offered in late spring 2002 and were expanded to include Adult Skills Training, such as the Alabama Ready-to-Work program, in summer 2002. New offerings are added regularly and are listed on the College website.

Drake State provides a spectrum of training opportunities to meet student needs for professional development. In addition to credit programs and customized training for business and industry, these include:

Continuing Education classes, which tend to be general in nature and appeal, short duration, and are generally self-paid.

Adult Skills Training classes can range from a few hours in length to up to a year. They tend to be focused on particular career fields and are intended to serve incumbent or potential workers in that career field. They typically will be paid for by the worker's employer, an outside agency, or funded through a WIOA Individual Training Account.

Students taking these classes are admitted to the Continuing Education/Adult Skills Training programs of the College and considered separate from the credit degree and certificate programs of the College. For admission to offer the credit programs of the College, a separate application form must be completed and submitted to the Director of Admissions.

Adult Education /GED

The Drake State Adult Education Program provides academic instruction from very basic skills up to the college level. Areas of instruction includes the following services:

- **Adult Basic Education Classes**: Reading, writing, math, social studies, and science.
- **General Educational Development (GED) Preparation Classes** The goal of these classes is to prepare adults age 17 and over for Pearson Vue's GED Tests. The General Educational Development (GED) Tests are a nationally recognized assessment that gives people from all walks of life an opportunity to certify their high school education. The GED Tests also provide a true measure of high school achievement. The GED Tests cover the academic knowledge and skills learned in four years of high school: reading, writing, social studies, science, and mathematics.
- **Non-Traditional High School Diploma Option (HSO):** The Alabama Non-Traditional High School Diploma Option Program is an alternative to the GED high school equivalency, designed for students who have completed all of the required credits for graduation but failed the Alabama High School Graduation Exam (AHSGE), or students who have dropped out of the traditional high school setting. Students must be 19 years or older to participate in the program.
- **English Literacy Classes**: Classes providing non-English speaking individuals with the language skills needed to succeed in other educational/training programs and to cope more effectively with the challenges of their daily lives. English Language Acquisition (formerly referred to as ESL) is the instruction that assists individuals of limited English proficiency to achieve competence in the English language. Instruction is geared to adults who want to become more fluent in English, pass the U.S. citizenship test and/or GED Test, and work on job-seeking skills.
- **Adult Education Bridge Program**: The Bridge Program was designed with first time college students in mind. Bridge classes allow students to remediate or "refresh" in Math (MTH 098) and Language (ENR 098) skills and prepare for future credit-bearing classes.
- **Digital Literacy:** Digital Literacy Certificate Program is a free self-guided online set of assessments that show your ability to perform basic computer tasks.
- **Preparation for WorkKeys Test:** The ACT WorkKeys assessments help you measure the workplace skills that can affect your job performance. Drake State utilizes the WorkKeys assessment to establish career readiness scores. The Career Readiness Certificate (CRC) is an assessment-based credential that gives employers and career seekers a uniform measure of key workplace skills.
- **Ready to Work:** Alabama's Ready to Work program provides trainees the entry-level skills required for employment with most businesses and industries in Alabama. We are AIDT certified to teach Ready to Work, the employability curriculum preferred by the Region 1 Workforce Development Board. The training curriculum is set to standards cited by business and industry employers throughout the state, and the skills cited in the U.S. Department of Labor's Secretary's Commission on Achieving Necessary Skills (SCANS) Reports.
- **GED 4 Me:** Program allows individuals to take the GED Ready Practice Tests in all four subject areas at no cost. These areas include Reasoning through Language Arts, Social Studies, Science, and Math. If the student earns a score of 145 or better, "likely to pass", in all four subject areas they will then be given a voucher to take the actual GED test for free. If the individual scores less than 145 on a subject they must enroll in the Adult Program for 15 hours of remediation. Once the remediation hours are completed the individual will be

given a retake of the GED Ready to earn 145 or better. When the passing score is earned, the individual is now eligible to receive the free GED test voucher.

These classes are offered at no cost to the students, and are designed to be open-entry, open-exit. Any individual who is at least 16 years of age and not enrolled in another educational program is eligible to participate in the Adult Education Program. Students can start taking classes at any time during the year. Classes are offered on-campus and at satellite locations around the city, with meeting times in the mornings, afternoons, and evenings in order to accommodate students' various schedules.

For more information about Drake State's Adult Education program, please contact the Adult Education Director at 256-551-5211, or visit our website.

INSTRUCTIONAL PROGRAMS

Program	Program Abbreviation	Degree	Division
Advanced Manufacturing, **Electrical Technology**	ELT	AAS, CER, STC	Advanced Manufacturing Technologies
Advanced Manufacturing, **Engineering Design**	DDT	AAS, CER, STC	Advanced Manufacturing Technologies
Advanced Manufacturing, **Machine Tool**	MTT	AAS, CER, STC	Advanced Manufacturing Technologies
Advanced Manufacturing, **Mechatronics**	INT,MTT,WDT	AAS, CER, STC	Advanced Manufacturing Technologies
Advanced Manufacturing, **Welding**	WDT	AAS, CER, STC	Advanced Manufacturing Technologies
Associate in Arts		AA, STC	General and Developmental Education
Associate in Science		AS, STC	General and Developmental Education
Automotive Service Technology	ASE	AAS, STC	Advanced Manufacturing Technologies
Business Administration – **Accounting**	BU1	AAS, STC	Business, Computer Science and Engineering Technologies
Business Administration – **General Business**	BUS	AAS, STC	Business, Computer Science and Engineering Technologies
Business Administration – **Management**	BU3	AAS, STC	Business, Computer Science and Engineering Technologies
Computer Information Systems	CIS	AAS, STC	Business, Computer Science and Engineering Technologies
Cosmetology Instructor Training	CIT	STC	Applied Services Technologies
Heating and Air Conditioning	ACR	AAS, CER, STC	Advanced Manufacturing Technologies
Medical Assistant Technology	MAT	AAS, CER, STC	Health Sciences Technologies
Registered Nursing	NUR	AAS, CER, STC	Health Sciences Technologies
Salon Management – **Barbering**	SA3	CER, STC	Applied Services Technologies
Salon Management – **Cosmetology**	SAL	AAS, STC	Applied Services Technologies
Salon Management – **Esthetics**	SA2	CER	Applied Services Technologies
Salon Management – **Nail Care**	SA4	STC	Applied Services Technologies
Salon Management – **Natural Hair**	SA5	STC	Applied Services Technologies

Institutional Requirements

ORI 101- Orientation to College is required of all students except transfer students who have transferred 12 or more semester hours to Drake State from a former institution.
Upon entry to our college program, students will be provided with a WorkKeys™ assessment as part of the Orientation to College course to identify current career readiness scores.

BSS220- Professional Transition Course is required for all students during the final semester of coursework in the program award for which they intend to graduate. This institutional course provides final preparation for graduation and entry into the new career field chosen by the student.

Instructional Programs

Programs of study offered at Drake State include university parallel programs, career technical programs, and certificate programs.

University Parallel Programs: Associate Degrees

Associate degrees require a minimum of 61 credit hours of coursework. The Directory of Programs in the previous section gives a list of degree programs Drake State offers.

A university parallel program allows a student to complete the first two years of a baccalaureate degree. These programs are designed to transfer to a four-year college or university. Drake State offers two transfer degrees:

Associate in Arts (A.A.)
Associate in Science (A.S.)

The Associate in Arts and Associate in Science degrees are awarded to students completing a planned university-parallel program to meet the requirements of the first two years of a Bachelor of Arts or Bachelor of Science degree. Since Area V requirements vary with individual four-year institutions, and all courses will not satisfy these requirements, students must obtain approved university parallel degree plans from the appropriate university. The degree plan will also indicate the courses needed in addition to the general education core to complete the degree.

Associate in Applied Science Degrees

Career and Technical programs lead to the Associate in Applied Science degree requiring 60 – 76 credit hours for completion. These programs are intended to prepare students for specific careers or occupational enhancement. These programs also include some general education courses. Although these programs are not designed primarily for transfer, many of the courses are transferable to four-year institutions.

Certificates and Short Certificates

Certificate programs are especially designed for students who wish to prepare for careers or career advancement through short-term, intensive programs.

Many of the college's programs have grouped related courses into certificates requiring 60 hours or less to complete. Students may choose to pursue certificates as alternatives to, or in addition to, associate degrees. There are two levels of these course groupings: (1) Certificates comprised of 30 to 60 credit hours of course work and (2) Short Certificates comprised of 9 to 29 credit hours of course work.

The coursework required for a Short Certificate is generally deemed sufficient for students to acquire the minimum skills required for an entry-level position in the related field. However, they do not include coursework intended to develop the student's critical-thinking and generalized problem-solving skills. Programs offering associate degrees do so because the College's industry partners have rated the associate degree as a valuable asset in their workforce.

The coursework for Certificate programs are grouped to provide students with industry-specified skill sets deemed necessary for specific tasks within the related industry, and consequently may be used by students and graduates to provide proof of credentials to prospective employers. However, students should be cautioned that employers, when making hiring decisions or considering promotions, place emphasis on completion of degrees in programs that offer them. For most students, obtaining Certificates should be seen as completing building blocks toward meeting career objectives.

Transfer Guide

The Associate in Arts and Associate in Science degrees are sets of courses leading to baccalaureate degrees. Associate in Arts and Associate in Science degree students do not officially major in an academic discipline at Drake State. Majors are defined by the institution to which these students transfer. Associate in Arts and Associate in Science degree students are assigned to advisors on the basis of intended majors or fields of interest indicated. Students planning to transfer to a four-year institution should decide as early as possible the college and program to which they will transfer. Transfer guides have been developed for Alabama's colleges and universities. Drake State provides transfer guides and agreements for state colleges and universities through the Statewide Transfer and Articulation Reporting System (STARS) program. Templates approved by the Articulation and General Studies Committee (AGSC) are available in Drake State advisors' offices and in the Office of Counseling, Advising and Testing.

STARS is a computerized articulation and transfer planning system used to inform Alabama community college students about degree requirements, course equivalencies and other transfer information pertaining to specific majors at each state-funded four-year institution. STARS is an efficient and effective way of providing students, counselors and educators with accurate information upon which transfer decisions can be based. The STARS database, if used properly, can prevent loss of course credit hours, provide direction for scheduling course work and ease the transition from one institution to another. Students should request their guides or agreements when they meet with their academic advisors during New Student Orientation.

To ensure proper interpretation of the AGSC guides/agreements, students who have completed postsecondary coursework at other institutions should request an evaluation of their courses by their intended transfer institutions before registering for classes at Drake State. While Drake State makes every effort through advising and printed materials to provide accurate information to meet transfer and degree requirements, it is the student's responsibility to select and register for courses needed to meet those requirements.

In addition to following the transfer guide, students are advised to personally contact their transfer schools to verify specific admissions and course requirements for their majors.

For a listing of AGSC templates and/or articulation guides refer to the following link http://stars.troy.edu .

ADVANCED MANUFACTURING

The Advanced Manufacturing Program prepares individuals to apply basic engineering principles and technical skills to the identification and resolution of production problems in the manufacture of products. It includes instruction in machine operations, production line operations, engineering analysis, systems analysis, instrumentation, physical controls, automation, computer-aided manufacturing (CAM), manufacturing planning, quality control, and informational infrastructure.

The Associate in Applied Science Degree in Advanced Manufacturing (ADM) has options in Additive Manufacturing, Electrical Technology, Engineering Design Technology, Injection Molding, Machine Tool Technology, Mechatronics, Welding Technology, and certificates are also available to shape the fundamentals into different forms in manufacturing of operations.

Electrical Technology

The Electrical Technology prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. Includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.

Electrical Technology Degree- AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher and a 4-credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4

MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 48 Cr. Hrs. (33 major core, 15 electives, 2 institutional)

ADM105	Fluid Systems	3
ADM111	Manufacturing Safety Practices	3
ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3
ELT114	Residential Wiring Methods	3
ELT115	Residential Wiring Methods II	3
ELT117	AC/DC Machines	3
ELT118	Commercial/Industrial Wiring I	3
ELT209	Motor Controls I	3
ELT230	Programmable Controls	6

General Electives 15 Cr. Hrs.

Note: ELT253, ELT254, and INT126 are highly recommended.

ADM101	Precision Measurement	3
ADM106	Quality Control Concepts	3
ELT 219	Fluid Power Systems	3
ELT231	Introduction to Programmable Controllers	3
ELT241	National Electric Code	3
ELT253	Industrial Robotics	3
ELT254	Robot Maintenance and Troubleshooting	3
INT126	Preventive Maintenances	3
ADM283	CO-OP	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 72

Electrical Wiring – CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3

REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

No Requirements

Area V: Pre-professional, Major and Elective Courses 26 Cr. Hrs.
(24 major core, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM111	Manufacturing Safety Practices	3
ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3
ELT114	Residential Wiring Methods	3
ELT115	Residential Wiring Methods II	3
ELT117	AC/DC Machines	3
ELT118	Commercial /Industrial Wiring	3
ELT209	Motor Controls I	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 38

Electrical Fundamentals - STC1

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities & Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM111	Manufacturing Safety Practices	3
ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3

Total STC1 Credit Hours 9

Preventive Maintenance - STC2

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 12 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM111	Manufacturing Safety Practices	3
ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3
INT126	Preventative Maintenance	3

Total STC2 Credit Hours 12

Robotics - STC3

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM105	Fluid Systems	3
ELT253	Ind. Robotics	3
ELT254	Robot Maintenance and Troubleshooting	3

Total STC3 Credit Hours 9

Engineering Design

Engineering Design prepares students for work in the mechanical, architectural or electronic drafting fields. Students start by changing or redrawing plans and advance to designing complete working drawings from preliminary sketches and specifications using Computer Aided Drafting Design (CAD) software systems. Additional training allows a student to calculate the strength, size and cost of materials.

Engineering Design Degree - AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher and a 4-credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4

GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 41 Cr. Hrs. (27 major core 12 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM 102	Computer Aided Design	3
ADM106	Quality Control Concepts	3
ADM107	CAD Concepts	3
ADM108	Intro to 3D Modeling	3
ADM110	Blueprint Reading	3
ADM128	Plastic Metal Process	3
ADM155	Manufacturing Projects	3
ADM215	Geometric Dimensioning & Tolerancing	3

General Electives 12 Cr. Hrs.

Note: The DDT233, DDT235, DDT236, and ADM260 are highly recommended.

ADM111	Manufacturing Safety Practices	3
ADM114	Introduction to CATIA	3
ADM216	3D Graphics and Animation	3
ADM260	Portfolio	3
ADM261	Reverse Engineering	3
ADM283	CO-OP	3
DDT130	Fundamentals of Drafting or Related Trades	3
DDT144	Basic 3D Modeling	3
DDT226	Technical Illustration	3
DDT233	Intermediate 3D Modeling	3
DDT235	Specialized CAD	3
DDT239	Independent Studies	3
GIS201	Introduction to Geographic Information Systems	3
WKO110	NCCER	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 63

Engineering Design- CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 26 Cr. Hrs.
(24 required, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM102	Computer Aided Design	3
ADM107	CAD Concepts	3
ADM108	Intro to 3D Modeling	3
ADM110	Blueprint Reading	3
ADM114	Design Innovation	3
ADM128	Plastic Metal Process	3
ADM155	Manufacturing Projects	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 38

Advanced Certificate - STC1

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM102	Computer Aided Design	3
ADM114	Design Innovation	3

Total STC1 Credit Hours 9

Mechanical Design Fundamentals - STC2

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM102	Computer Aided Design	3
ADM107	CAD Concepts	3

Total STC2 Credit Hours 9

Mechanical Design Quality - STC3

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 12 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM106	Quality Control Concepts	3
ADM110	Blueprint Reading	3
ADM155	Manufacturing Projects	3
ADM215	Geometric Dimensioning & Tolerancing	3

Total STC3 Credit Hours 12

Machine Tool

The Machine Tool Technology program prepares individuals to apply technical knowledge and skills to operate machine tools used in the forming of metal components, as well as the fabrication of special tools, dies, jigs and fixtures used in cutting, working and finishing metal components.

Machine Tool- AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher and a 4 credit hour science are required.

Course	Title	Cr. Hrs.
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences — 3 Cr. Hrs.

Course	Title	Cr. Hrs.
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses (39 major core, 6 electives, 2 institutional) — 47 Cr. Hrs.

Course	Title	Cr. Hrs.
ADM101	Precision Measurement	3
ADM110	Blueprint Reading	3
ADM111	Manufacturing Safety Practices	3
MTT107	Machining Calculations I	3
MTT129	Lathe Operations	6
MTT139	Basic Computer Numerical Control	3
MTT140	Basic Computer Numerical Control Turning Programming I	3
MTT141	Basic Computer Numeric Control Milling Programming I	3
MTT147	Intro to Machine Shop I	3
MTT148	Intro to Machine Shop I Lab	3
MTT149	Intro to Machine Shop II	3
MTT150	Introduction to Machine Shop II Lab	3

General Electives — 6 Cr. Hrs.

MTT125	Introduction to Machining Technology	3
MTT128	Geometric Dimensioning Tolerancing I	3
MTT134	Lathe Operations I	3
MTT135	Lathe Operations I Lab	3
MTT219	Computer Numerical Control Graphics: Turning	3
MTT220	Computer Numerical Control Graphics: Milling	3
ADM102	Computer Aided Design	3
ADM106	Quality Control Concepts	3
ADM283	CO-OP	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	Title	Cr. Hrs.
ORI101	Orientation to College	1

BSS220	Professional Transition	1

Total AAS Degree Credit Hours 69

Machining Fundamentals - CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 23 Cr. Hrs.
(21 required, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM110	Blueprint Reading	3
ADM111	Manufacturing Safety Practices	3
MTT147	Intro to Machine Shop I	3
MTT148	Intro to Machine Shop I Lab	3
MTT149	Introduction to Machine Shop II	3
MTT150	Introduction to Machine Shop II Lab	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 35

CNC Machining Fundamentals- CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*

ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 26 Cr. Hrs.
(21 required, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM110	Blueprint Reading	3
ADM111	Manufacturing Safety Practices	3
MTT107	Machining Calculations I	3
MTT139	Basic Computer Numerical Control	3
MTT140	Basic Computer Numerical Control Turning Programming I	3
MTT141	Basic Computer Numeric Control Milling Programming I	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 35

Precision Machining Milling - STC1

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
MTT 149	Intro to Machine Shop II	3
MTT 150	Intro To Mach Shop II Lab	3

Total STC1 Certificate Credit Hours 9

Precision Machining Fundamentals- STC2

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
MTT147	Intro to Machine Shop I	3
MTT148	Intro to Machine Shop I Lab	3

Total STC2 Certificate Credit Hours 9

Manufacturing Skills Standards Council (MSSC) Certification

MSSC is a short-term certificate to implement nationally recognized industry certification programs driven by industries' hiring practices and workforce occupational forecasts. This STC is comprised of 12 credit hours to include courses in the following areas: Safety, Quality Practices and Measurement, Manufacturing Processes and Production, and Maintenance Awareness.

MSSC- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 12 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
WKO131	MSSC Safety Course	3
WKO132	MSSC Quality Practice and Measurement Course	3
WKO133	MSSC Manufacturing Processes and Production Course	3
WKO134	MSSC Maintenance Awareness Course	3

Total Certificate Credit Hours 12

Mechatronics

Mechatronics is a curriculum designed to teach courses in, Industrial Wiring, Precision Measurements, Pneumatic and Hydraulics Systems, Preventive Maintenance, Industrial Automation Systems, Frequency and Mechanical Drives, and Industrial Robotics. The course delivers a workforce readiness platform for those who are seeking employment in Industrial Maintenance and Advanced Manufacturing, but also for Maintenance Technicians currently employed in the field.

Mechatronics- AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3

ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher and a 4-credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 47 Cr. Hrs. (36 major core, 9 electives, required, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM106	Quality Control	3
ADM110	Blueprint Reading	3
ADM111	Manufacturing Safety Practices	3
MTT139	Basic Computer Numerical Control	3
MTT147	Intro to Machine Shop I	3
WDT157	Consumable Welding Processes	3
INT101	DC Fundamentals	3
INT103	AC Fundamentals	3
INT118	Fundamentals of Industrial Hydraulics and Pneumatics	3
INT158	INDUSTRIAL WIRING I	3
INT206	Industrial Motors I	3

General Electives 9 Cr. Hrs.

Note: INT284, and INT288 are highly recommended.

ADM283	CO-OP	3
INT126	Preventive Maintenance	3
INT253	Industrial Robotics	3
INT254	Robot Maintenance and Troubleshooting	3
INT284	Advanced Programmable Logic Controllers	3
INT288	Applied Principles of Programmable Controllers	3
WKO110	NCCER Core	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 69

Industrial Maintenance – ADM CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 32 Cr. Hrs. (30 required, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM106	Quality Control Concepts	3
ADM110	Blueprint Reading	3
ADM111	Manufacturing Safety Practices	3
INT101	DC Fundamentals	3
INT103	AC Fundamentals	3
INT118	Fundamentals of Industrial Hydraulics and Pneumatics	3
MTT139	Basic Computer Numerical	

	Control	3
MTT147	Intro to Machine Shop I	3
WDT157	Consumable Welding Processes	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 44

IND Electrical Fundamentals- STC1

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM111	Manufacturing Safety Practices	3
INT101	DC Fundamentals	3
INT103	AC Fundamentals	3

Total STC1 Certificate Credit Hours 9

Industrial Automation- STC2

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 12 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM111	Manufacturing Safety Practices	3
INT101	DC Fundamentals	3
INT103	AC Fundamentals	3
INT126	Preventive Maintenance	3

Total STC2 Certificate Credit Hours 12

Industrial Automation - STC4

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 21 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM111	Manufacturing Safety Practices	3
INT101	DC Fundamentals	3
INT103	AC Fundamentals	3
INT126	Preventive Maintenance	3
INT253	Industrial Robotics	3
INT254	Robot Maintenance and Troubleshooting	3

Total STC4 Credit Hours 21

Welding

Welding is designed to teach the principles of welding as well as the nature of metals and types of gases used in welding. The welding curriculum also includes skills in welding and fusing of various metal types using an array of techniques and methods.The program is designed to provide qualified individuals the opportunity to acquire the knowledge, attitudes, and skills to obtain a certificate verifying their competency in the basic requirements of Welding Technology.

Advanced Manufacturing Welding- AAS

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH116 or higher and a 4-credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3

HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 47 Cr. Hrs.
(33 major core, 12 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
ADM106	Quality Control Concepts	3
ADM111	Manufacturing Safety Practices	3
WDT110	Industrial Blueprint Reading	3
WDT119	Gas Metal Arc/Flux Cored Arc Welding	3
WDT124	Gas Metal Arc/Flux Cored Arc Welding Lab	3
WDT157	Consumable Welding Processes	3
WDT158	Consumable Welding Processes Lab	3
WDT228	Gas Tungsten ARC Welding	3
WDT268	Gas Tungsten ARC Lab	3
WDT280	Special Topics	3

General Electives 12 Cr. Hrs.

ADM102	Computer Aided Design	3
ADM110	Blueprint Reading	3
ADM128	Plastic Material Processes	3
ADM283	CO-OP	3
WDT108	SMAW Fillet/ OFC	3
WDT109	SMAW Fillet/PAC/CAC	3
WDT115	GTAW Carbon Pipe	3
WDT120	Shielded Metal Arc Welding Groove	3
WDT125	Shielded Metal Arc Welding Groove Lab	3
WDT155	GTAW Carbon Pipe Lab	3
WDT166	Flux Core Arc Welding	3
WDT167	Flux Core Arc Welding Lab	3
WDT217	SMAW Carbon Pipe	3
WDT218	Certification	3
WDT219	Welding Inspection & Testing	3
WDT257	SMAW Carbon Pipe Lab	3
WDT258	Certification Lab	3
WDT269	Boiler Tube Lab	3
WDT281	Special Topics in Welding Technology	3
WKO110	NCCER Core	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 69

Welding – CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3

SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH116 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH116	Mathematical Applications	3
MTH100	Intermediate College Algebra	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 23 Cr. Hrs.
(21 required, 2 institutional)

Note: All courses are required except.

Course	*Title*	*Cr. Hrs.*
WDT119	Gas Metal Arc/Flux Cored Arc Welding	3
WDT124	Gas Metal Arc/Flux Cored Arc Welding Lab	3
WDT157	Consumable Welding Processes	3
WDT158	Consumable Welding Processes Lab	3
WDT228	Gas Tungsten ARC Welding	3
WDT268	Gas Tungsten ARC Lab	3
WDT280	Special Topics	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 35

SMAW - STC1

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT108	SMAW Fillet/OFC	3
WDT109	SMAW Fillet/PAC/CAC	3

Total STC1 Credit Hours 9

GMAW- STC2

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT119	Gas Metal Arc/Flux Cored Arc Welding	3
WDT124	Gas Metal Arc/Flux Cored Arc Welding Lab	3

Total STC2 Credit Hours 9

FCAW- STC3

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT166	Flux Core ARC Welding	3
WDT167	Flux Core ARC Welding Lab	3

Total STC3 Credit Hours 9

GTAW- STC4

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT228	Gas Tungsten ARC Welding	3
WDT268	Gas Tungsten ARC Lab	3

Total STC4 Credit Hours 9

Welding Blueprint- STC5

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT110	Industrial Blue Printing	3
WDT219	Welding Inspection & Testing	3

Total STC5 Credit Hours 9

Consumable Welding- STC6

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT157	Consumable Welding Processes	3
WDT158	Consumable Welding Processes Lab	3

Total STC6 Credit Hours 9

AWS Certification- STC 7

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT218	Certification	3
WDT258	Certification Lab	3

Total STC7 Credit Hours 9

SMAW Pipe Welding - STC8

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT217	SMAW Carbon Pipe	3
WDT257	SMAW Carbon Pipe Lab	3

Total STC8 Credit Hours 9

GTAW Pipe Welding - STC9

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT115	GTAW Carbon Pipe	3
WDT155	GTAW Carbon Pipe Lab	3

Total STC9 Credit Hours 9

SMAW Grooves - STC10

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ADM101	Precision Measurement	3
WDT120	Shielded Metal ARC Welding Groove	3
WDT125	Shielded Metal ARC Welding Groove Lab	3

Total STC10 Credit Hours 9

Automotive Technology

The Automotive Technology program prepares individuals to apply basic engineering principles and technical skills in support of engineers and other professionals engaged in developing, manufacturing and testing self-propelled ground vehicles and their systems. It includes instruction in vehicular systems technology, design and development testing, prototype and operational testing, inspection and maintenance procedures, instrument calibration, test equipment operation and maintenance, and report preparation.

Automotive Technology - AAS

Area I: Written Composition 3 Cr Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher and a 4-credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3

POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 47 Cr. Hrs. (39 required, 6 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ASE101	Fundamentals of Auto Technology	3
ASE112	Electrical Fundamentals	3
ASE121	Braking Systems	3
ASE122	Steering & Suspension	3
ASE124	Automotive Engines	3
ASE130	Drive Train & Axle	3
ASE133	Motor Vehicle A/C	3
ASE162	Electrical and Electronic Systems	3
ASE224	Manual Transmission And Transaxle	3
ASE230	Automatic Transmission And Transaxle	3
ASE244	Engine Performance and Diagnostics	3
ASE263	Hybrid and Electric Vehicle	3
ASE281	Special Topics	3

General Electives 6 Cr. Hrs.

ADM101	Precision Measurements	3
ASE212	Advanced Electrical and Electronic Systems	3
ASE220	Advanced Automotive Engines	3
ASE246	Automotive Emissions	3
ASE290	CO-OP	3
WDT119	Gas Metal ARC/Flux Cored ARC Welding	3
WDT124	GMA/Flux Cored ARC Lab	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Cr. Hrs. 69

Automotive Technology - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 24 Cr. Hrs. (24 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
ASE101	Fundamentals of Automotive Technology	3
ASE112	Electrical Fundamentals	3
ASE121	Braking Systems	3
ASE122	Steering & Suspension	3
ASE124	Automotive Engines	3
ASE130	Drive Train & Axles	3
ASE133	Motor Vehicle Air Conditioning	3
ASE162	Electrical and Electronic Systems	3

Total STC Credit Hours 24

Automotive Electrical - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs. (9 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
ASE101	Fundamentals of Automotive Technology	3
ASE112	Electrical Fundamentals	3
ASE162	Electrical and Electronic Systems	3

Total STC Credit Hours 9

Brakes and Suspensions - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs. (9 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
ASE101	Fundamentals of Automotive Technology	3
ASE121	Braking Systems	3
ASE122	Steering & Suspension	3

Total STC Credit Hours 9

Engine Repair - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs. (9 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
ASE101	Fundamentals of Automotive Technology	3
ASE124	Automotive Engines	3
ASE220	Advanced Automotive Engines	3

Total STC Credit Hours 9

Heating and Air Conditioning/Refrigeration

The purpose of the Heating and Air Conditioning program is to provide accessible, quality educational opportunities that will provide individuals with knowledge, technical skills, and attitudes necessary to obtain entry-level employment in the heating and air conditioning profession.

Heating and Air Conditioning/Refrigeration - AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Lit. I	3
ENG252	American Lit. II	3
ENG261	English Lit I	3
ENG262	English Lit II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3

REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher and a 4-credit science are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 44 Cr. Hrs. (30 major core, 12 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ACR111	Principles of Refrigeration	3
ACR112	HVACR Service Procedure	3
ACR113	Refrigeration Piping Practices	3
ACR119	Fundamentals of Gas Heating Systems	3
ACR122	HVACR Electrical Circuits	3
ACR132	Residential Air Conditioning	3
ACR148	Heat Pump System I	3
ACR149	Heat Pump System II	3
ACR209	Commercial Air Conditioning Systems	3
ACR210	Troubleshooting HVACR Systems	3

General Electives 12 Cr. Hrs.

ACR120	Fundamentals of Electrical Heating Systems	3
ACR121	Principles of Electricity for HVACR	3
ACR123	HVAC/R Electrical Components	3
ACR125	Fundamentals of Gas and Electrical Heating Systems	6
ACR126	Commercial Heating Systems	3
ACR152	Heat Pump Systems	6

ACR181	Special Topics in Air Conditioning and Refrigeration I	3
ACR182	Special Topics in Air Conditioning and Refrigeration II	3
ACR192	HVAC Apprenticeship/ Internship	3
ACR195	CO-OP	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 66

Heating and Air Conditioning/Refrigeration - CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Lit. I	3
ENG252	American Lit. II	3
ENG261	English Lit I	3
ENG262	English Lit II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146, MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*

Area V: Pre-professional, Major and Elective Courses 26 Cr. Hrs. (24 major core, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ACR111	Principles of Refrigeration	3
ACR112	HVACR Service Procedure	3
ACR113	Refrigeration Piping Practices	3
ACR119	Fundamentals of Gas Heating Systems	3
ACR122	HVAC Electrical Circuits	3
ACR132	Residential Air Conditioning	3
ACR148	Heat Pump System I	3
ACR149	Heat Pump System II	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1
Total Certificate Credit Hours		38

Heating and Air Conditioning/Refrigeration - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses
21 Cr. Hrs. (21 major core required)

Course	*Title*	*Cr. Hrs.*
ACR111	Principles of Refrigeration	3
ACR112	HVACR Service Procedure	3
ACR113	Refrigeration Piping Practices	3
ACR119	Fundamentals of Gas Heating Systems	3
ACR121	Principles of Electricity for HVACR	3
ACR122	HVAC Electrical Circuits	3
ACR123	HVAC/R Electrical Components	3
Total STC Credit Hours		21

APPLIED SERVICES TECHNOLOGIES

Cosmetology Instructor Training-STC

This course focuses on principles of teaching, teaching maturity, professional conduct, and the development of cosmetology curriculum. Emphasis is placed on teacher roles, teaching styles, teacher challenges, aspects of curriculum development, and designing individual courses. Upon completion, the student should be able to describe the role of teacher, identify means of motivating students, develop a course outline, and develop lesson plans.

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 18 Cr. Hrs.
(18 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
CIT211	Teaching and Curriculum Development	3
CIT212	Teaching Mentorship	3
CIT213	Cosmetology Instructor Co-op	3
CIT214	Lesson Plan Methods and Development	3
CIT222	Aud/Vis Materials & Methods	3
CIT223	Aud/Vis Materials & Methods Applications	3
Total STC Credit Hours		18

Salon Management

The Salon Management program prepares cosmetologists, hairstylists, and other personal grooming specialists to manage beauty parlors, shops, and full-service or specialized salons and to prepare for licensure as professional salon owners and operators. Includes instruction in cosmetic services marketing and retailing; advertising and promotion; salon management; the cosmetic and salon supply industries; hiring, supervision, and labor relations; applicable business and professional laws and regulations; professional standards and image; and customer service.

Cosmetology - AAS

The Cosmetology program is a full-time program combining classroom theory with hands-on practice in the laboratory. The program is designed to provide qualified individuals the opportunity to acquire the knowledge, attitudes, and skills to obtain a degree or certificate verifying their competency in Cosmetology. Graduates of the Cosmetology program are eligible to take the Alabama State Board Examination for licensure as a cosmetologist.

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH116 or higher and a 4-hour science course are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH116	Mathematical Applications	3
MTH100	Intermediate College Algebra	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Note: PSY200 is preferred.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 47 Cr. Hrs. (36 major core, 9 electives, 2 institutional).

Course	*Title*	*Cr. Hrs.*
ACT201	Entrepreneurism	3
COS111	Introduction to Cosmetology	3
COS112	Introduction to Cosmetology Lab	3
COS113	Theory of Chemical Services	3
COS114	Chemical Services Lab	3
COS120	Hair Coloring Theory and Lab Combined	3
COS121	Basic Spa Techniques Theory And Lab Combined	3
COS123	Cosmetology Salon Practices	3
COS143	Specialty Hair Preparation Techniques	3
COS144	Hair Shaping and Design	3
COS167	State Board Review	3
SAL133	Salon Management Technology	3

General Electives 9 Cr. Hrs.

BAR108	Introduction to Barbering	3
BAR111	Introduction to Barbering Lab	3
BAR112	Science of Barbering	3
BAR113	Fundamentals of Barbering Applications	3
BAR140	Practicum I	2
BAR141	Practicum II	2
COS134	Advanced Esthetics	3
COS145	Hair Shaping Lab	3
COS146	Hair Additions	3
COS148	Nail Care Theory	3
COS149	Nail Care Art Theory	3
COS152	Nail Care Applications	3
COS154	Nail Art Applications	3
COS163	Facial Treatments	3
COS164	Facial Machine	3
COS165	Related Subjects Estheticians	3
COS168	Bacteriology and Sanitation	3
COS169	Skin Functions	3

Institutional Requirements (2 credits):

***Note:** ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 69

Barbering

This Barbering Certificate Program combines classroom theory with hands-on practice in the laboratory. Course requirements include general education courses and barbering courses. The program is designed to provide qualified individuals the opportunity to acquire the knowledge, attitude, and skills to obtain a Certificate in Barbering.

Barbering- CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH116 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH116	Mathematical Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 36 Cr. Hrs.
(34 required, 2 institutional)

Course	*Title*	*Cr. Hrs.*
BAR108	Introduction to Barbering	3
BAR111	Introduction to Barbering Lab	3
BAR112	Science of Barbering	3
BAR113	Fundamentals of Barbering Applications	3
BAR140	Practicum I	2
BAR141	Practicum II	2
COS113	Theory of Chemical Service	3
COS114	Chemical Service Lab	3
COS120	Hair Coloring Theory and Lab Combined	3
COS144	Hair Shaping Design	3
COS167	State Board Review	3
Note: required for state board license only, county not required		
SAL133	Salon Management Technology	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 48

Barbering- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 17 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
BAR108	Introduction to Barbering	3
BAR111	Introduction to Barbering Lab	3
BAR112	Science of Barbering	3
BAR113	Fundamentals of Barbering Application	3
BAR140	Practicum I	2
SAL133	Salon Management Technology	3

Total STC Credit Hours 17

Esthetics- CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH116 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
	Trigonometry	4
MTH116	Mathematical Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra &	
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 26 Cr. Hrs. (24 required, 2 institutional)

Course	*Title*	*Cr. Hrs.*
COS134	Advanced Esthetics	3
COS163	Facial Treatments	3
COS164	Facial Machine	3
COS165	Related Subjects Estheticians	3
COS167	State Board Reviews Esthetics	3
COS168	Bacteriology and Sanitation	3
COS169	Skin Functions	3
SAL133	Salon Management Technology	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 38

Nail Care- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 21 Cr. Hrs.
(21 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
COS148	Nail Care Theory	3
COS149	Nail Care Art Theory	3
COS152	Nail Care Applications	3
COS154	Nail Art Applications	3
COS167	State Board Review	3
COS168	Bacteriology and Sanitation	3
SAL133	Salon Management Technology	3

Total STC Credit Hours 21

Natural Hair - STC

The Natural Hair STC is designed to educate the learner on everything they need to know about growing longer, healthier natural hair and more. Topics include hair, health, hair extensions, hair braiding, dreadlocks and culture from a holistic approach.

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
COS111	Introduction to Cosmetology	3
COS112	Introduction to Cosmetology Lab	3
COS146	Hair Additions	3

Total STC Credit Hours 9

Business, Computer Science, and Engineering Technologies

Business Administration - Accounting

The Accounting program is designed to teach, through a sequence of experiences, the skills necessary for a student to develop cognitive knowledge of the accounting process and to be able to apply this knowledge in a practical manner.

Accounting- AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3

REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher and a 4-credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Prin. of Physical Geo II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 44 Cr. Hrs. (27 major core, 15 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
ACT249	Payroll Accounting	3
ACT253	Individual Income Tax	3
BUS100	Introduction to Business	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS245	Accounting with QuickBooks	3
BUS248	Managerial Accounting	3
BUS263	Legal and Social Environment of Business	3
BUS271	Business Statistics I	3

General Electives 15 Cr. Hrs.

ACT114	Introduction to Accounting Database Resources	3
ACT115	Introduction to Accounting Computer Resources	3
ACT195	Accounting Co-op	3
ACT201	Entrepreneurism	3
ACT247	Advanced Accounting Applications on the Microcomputer	3
BUS146	Personal Finance	3
BUS147	Introduction to Finance	3
BUS186	Elements of Supervision	3
BUS215	Business Communication	3

BUS275	Principals of Management	3
BUS276	Human Resource Management	3
BUS279	Small Business Management	3
BUS285	Principals of Marketing	3
CIS147	Advanced Microcomputer Application	3
CIS185	Computer Ethics	3
CIS196	Commercial Software Applications	3
OAD101	Basic Keyboarding	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 66

Accounting- STC

Area I: Written Composition 3 Cr. Hrs.

ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH116 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH116	Mathematical Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs.
(15 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS245	Accounting with QuickBooks	3
BUS248	Managerial Accounting	3

Total STC Credit Hours 24

Accounting- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.
(9 major core required)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3

Total STC Credit Hours 9

Business Administration – Management

The Business Administration-Management Associate in Applied Sciences Degree is designed to accommodate the skills needed in specific areas of practical management, accounting, and marketing. The benefits of the program increase student's opportunities to be visible and marketable in the challenging world of work. The goal is to prepare efficient successful employees in their current jobs as well as their future career endeavors.

Business Management - AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher, and a 4-credit hour course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3

POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 44 Cr. Hrs. (24 major core, 18 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS186	Elements of Supervision	3
BUS215	Business Communication	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS245	Accounting with QuickBooks	3
BUS248	Managerial Accounting	3
BUS263	Legal and Social Environments of Business	3
BUS271	Business Statistics I	3
BUS275	Principals of Management	3
BUS276	Human Resource Management	3
BUS279	Small Business Management	3

General Electives 9 Cr. Hrs.

ACT114	Introduction to Accounting Database Resources	3
ACT115	Introduction Accounting Computer Resources	3
ACT195	Accounting Co-op	3
ACT201	Entrepreneurism	3
ACT249	Payroll Accounting	3
ACT253	Individual Income Tax	3
BUS146	Personal Finance	3
BUS147	Introduction to Finance	3
BUS285	Principals of Marketing	3
CIS147	Advanced Microcomputer Applications	3
CIS185	Computer Ethics	3
CIS196	Commercial Software Applications	3
OAD101	Beginning Keyboarding	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 66

Business Management- STC

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs. (15 required, 0 institutional)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS275	Principals of Management	3
BUS276	Human Resource Management	3

Total STC Credit Hours 24

Business Management- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.
(9 major core required)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS275	Principals of Management	3
BUS276	Human Resource Management	3

Total STC Credit Hours 9

Business Administration – General Business

The General Business program is designed to teach, through a sequence of experiences, the skills necessary for a student to develop a broad perspective and knowledge regarding business operations and to be able to apply this knowledge in a practical manner.

General Business - AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH100 or higher, and a one 4 credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
CIS146	Microcomputer Applications	3
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3

MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 44 Cr. Hrs. (24 major core, 18 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS215	Business Communication	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS263	The Legal and Social Environment of Business	3
BUS271	Business Statistics I	3
BUS275	Principals of Management	3
BUS276	Human Resource Management	3

General Electives 18 Cr. Hrs.

ACT114	Introduction to Accounting Database Resources	3
ACT115	Introduction to Accounting Computer Resources	3
ACT195	Accounting Co-op	3
ACT201	Entrepreneurism	3
ACT249	Payroll Accounting	3
ACT253	Individual Income Tax	3
BUS146	Personal Finance	3
BUS147	Introduction to Finance	3
BUS186	Elements of Supervision	3
BUS245	Accounting with QuickBooks	3
BUS248	Managerial Accounting	3
BUS272	Business Statistics II	3
BUS279	Small Business Management	3
BUS285	Principals of Marketing	3
CIS147	Advanced Microcomputer Applications	3
CIS185	Computer Ethics	3
CIS196	Commercial Software Applications	3
OAD101	Beginning Keyboarding	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 66

General Business- STC

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs.
(15 major core required)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS263	The Legal and Social Environments of Business	3
BUS275	Principals of Management	3

Total STC Credit Hours 24

General Business- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.
(9 major core required)

Course	*Title*	*Cr. Hrs.*
BUS100	Introduction to Business	3
BUS263	The Legal and Social Environments of Business	3
ACT201	Entrepreneurism	3

Total STC Credit Hours 9

Business Administration- Entrepreneurship STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs.
(15 major core required)

Course	*Title*	*Cr. Hrs.*
ACT201	Entrepreneurism	3
BUS241	Principles of Accounting I	3
BUS245	Accounting with QuickBooks	3
BUS276	Human Resource Management	3
BUS285	Principles of Marketing	3

Total STC Credit Hours 15

Business Administration- Logistics and Supply Chain - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs.
(15 major core required)

Course	*Title*	*Cr. Hrs.*
LGT108	Introduction to Logistics	3
LGT114	Supply Chain Fundamentals/ Management	3
LGT115	Purchasing in Logistics	3
LGT132	Physical Distribution Systems	3
LGT271	Supply Chain Analytics	3

Total STC Credit Hours 15

Computer Information Systems

The Computer Information Systems Technology program will prepare students for entry level employment, advancement, and industry certifications in information technology by teaching programming, networking, operating systems, web development, and cyber security using up-to-date methods and techniques that are prevalent in today's marketplace.

Computer Information Systems - AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Note: CIS146, MTH112 or higher and one four credit hour science course are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ECO231	Principles of Macroeconomics	3
ECO232	Principles of Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 47 Cr. Hrs. (27 major core, 18 electives, 2 institutional)

Course	*Title*	*Cr. Hrs.*
CIS149	Introduction to Computers	3
CIS150	Introduction to Computer Logic and Programming	3
CIS207	Web Development	3
CIS249	Microcomputer Operating Systems	3
CIS251	C++ Programming	3
CIS268	Software Support	3
CIS269	Hardware Support	3
CIS270	CISCO I CCNA	3
CIS281	Systems Analysis and Design	3

General Electives 18 Cr. Hrs.

CIS147	Advanced Microcomputer Applications	3
CIS151	Graphics for the World Wide Web	3
CIS157	Introduction to App Development with Swift	3
CIS160	Multimedia for the World Wide Web	3
CIS171	LINUX I	3
CIS172	LINUX II	3
CIS185	Computer Ethics	3
CIS189	CO-OP for CIS I	3
CIS196	Commercial Software Applications	3
CIS197	Advanced Commercial Software Applications	3
CIS199	Network Communication	3
CIS203	Introduction to the Information Highway	3
CIS208	Web Authoring Software	3
CIS209	Advanced Web Development	3
CIS212	Visual Basic Programming	3
CIS213	Advanced Visual Basic Programming	3
CIS215	C+ Programming	3
CIS220	App Development with Swift I	3
CIS222	Database Management Systems	3
CIS227	App Development with Swift II	3
CIS245	Cyber Defense	3
CIS246	Ethical Hacking	3
CIS249	Microcomputer Operating Systems	3
CIS252	Advanced C++ Programming	3
CIS255	JAVA Programming	3
CIS256	Advance Java	3
CIS271	Cisco CCNA II	3
CIS272	Cisco CCNA III	3
CIS273	Cisco CCNA IV	3
CIS276	Server Administration	3
CIS277	Network Services Administration	3
CIS280	Network Security	3
CIS282	Computer Forensics	3
CIS284	CIS Internship	3
CIS287	SQL Server	3
CIS294	Special Topics	3
CIS296	Special Topics	3
EET115	Concepts of Digital Electronics	5
EET186	Microprocessor Basics	3
EET232	Microprocessor Assembler	2
EET254	Microcomputer Systems Basic I	3
EET255	Microcomputer Systems Basic I Lab	2
EET256	Microcomputer Systems Advanced I	3
EET257	Microcomputer Systems	

	Advanced I Lab	2
ILT263	Certification Prep Lab	1

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 69

Computer Science- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.
(9 major core required)

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
CIS149	Introduction to Computers	3
CIS150	Introduction to Computer Logic and Programming	3

Total STC Credit Hours 9

Cyber Security

The Cyber Security Certificate introduces students to the interdisciplinary field of cyber security by discussing the evolution of information security into cyber security, cyber security theory, and the relationship of cyber security to nations, businesses, society, and people. Students will be exposed to multiple cyber security technologies, processes, and procedures, learn how to analyze the threats, vulnerabilities and risks present in these environments, and develop appropriate strategies to mitigate potential cyber security problems.

Cyber Security - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 18 Cr. Hrs.
(18 major core)

Course	*Title*	*Cr. Hrs.*
CIS171	Linux I	3
CIS199	Network Communications	3
CIS246	Ethical Hacking	3
CIS249	Microcomputer Operating Systems	3
CIS280	Network Security	3
CIS244	Intro to Cyber Security	3

Total STC Credit Hours 24

Cyber Security- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 12 Cr. Hrs.
(12 major core)

Course	*Title*	*Cr. Hrs.*
CIS199	Network Communications	3
CIS249	Microcomputer Operating Systems	3
CIS280	Network Security	3
CIS244	Intro to Cyber Security	3

Total STC Credit Hours 12

Enterprise Programmer- STC

This skills certificate is designed to provide the student with extended skills in object-oriented programming in the commonly used programming languages for modern enterprise systems: C++, Visual Basic, and JAVA.

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS130	Intro to Information Systems	3
CIS146	Microcomputer Applications	3
MTH116	Mathematical Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs.
(15 major core)

Course	*Title*	*Cr. Hrs.*
CIS150	Introduction to Computer Logic and Programming	3
CIS212	Visual Basic Programming	3
CIS251	C++ Programming	3
CIS252	Advanced C++ Programming	3
CIS255	JAVA Programming	3

Total STC Credit Hours 24

Google IT - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 10 Cr. Hrs.
(10 major core)

Course	*Title*	*Cr. Hrs.*
CIS120	Google IT Professional Support I Technical Support Fundamentals	2

CIS121	Google IT Professional Support Ii Computer Networking	2
CIS122	Google IT Professional Support Iii Operating Systems	2
CIS123	Google IT Professional Support Iv System Administration and It Infrastructure	2
CIS124	Google IT Professional Support V IT Security	2

Total STC Credit Hours 10

Network Administrator - STC

The Network Administrative Certificate is designed to introduce students to the basic concepts of computer networks. Emphasis is placed on gaining an understanding of the terminology and technology involved in implementing networked systems. The certificate focuses on developing in-depth knowledge and technical skills related to creating and maintaining computer network systems. In addition, students will receive hands-on experience building a mock network in the classroom.

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15Cr. Hrs. (15 major core)

Course	*Title*	*Cr. Hrs.*
CIS249	Microcomputer Operating Systems	3
CIS270	Cisco CCNA I	3
CIS271	Cisco CCNA II	3
CIS272	Cisco CCNA III	3
CIS273	Cisco CCNA IV	3

Total STC Credit Hours 24

Program Coding- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs. (9 major core)

Course	*Title*	*Cr. Hrs.*
CIS157	Introduction to App Development with Swift	3
CIS220	App Development with Swift I	3
CIS227	App Development with Swift II	3

Total STC Credit Hours 9

Systems Administrator- STC

This skills certificate is designed to provide the student with the extended skills necessary to perform in an entry-level position as a systems administrator in a Microsoft server network environment.

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs. (15 major core)

Course	*Title*	*Cr. Hrs.*
CIS149	Introduction to Computers	3
CIS249	Microcomputer Operating Systems	3
CIS276	Server Administration	3
CIS277	Network Services Administration	3
CIS280	Network Security	3

Total STC Credit Hours 24

Web Developer- STC

This skills certificate is designed to provide the student with extended skills for developing web pages, including the use of HTML, XHTML, and Microsoft FrontPage, DreamWeaver, and Flash web development platforms. Students successfully completing the Career Skills Certificate (CIW) qualify for associate and professional certification examinations.

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 6 Cr. Hrs.

Note: CIS146 and MTH100 or higher are required.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 15 Cr. Hrs. (15 major core)

Course	Title	Cr. Hrs.
CIS151	Graphics for the Worldwide Web	3
CIS160	Multimedia for World Wide Web	3
CIS196	Commercial Software Applications	3
CIS197	Advanced Commercial Software Applications	3
CIS207	Web Development	3
Total STC Credit Hours		24

GENERAL AND DEVELOPMENTAL EDUCATION

Associate in Arts - AA

A student enrolled at Drake State in an Associate in Arts degree program in Liberal Arts must complete 61 semester hours of general education requirements distributed among four core discipline areas (Areas I - IV) to satisfy the requirements for graduation and to receive the Associate in Arts degree.

Area I: Written Composition 6 Cr. Hrs.

Course	Title	Cr. Hrs.
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 12 Cr. Hrs.

Notes: Must complete 3 semester hours in literature and 3 semester hours in the arts. The remaining semester hours are to be selected from humanities and/or fine arts.*

Humanities and fine arts disciplines include but are not limited to: area/ethnic studies, art and art history, foreign languages, music and music history, philosophy, ethics, religious studies, and speech. (Prerequisites and/or developmental courses may be required prior to enrolling in these courses).

**Must complete a 6-semester hour sequence in literature.*

Course Title		Cr. Hrs.
ART100	Art Appreciation	3
ART203	Art History I	3
ART204	Art History II	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
RDG114	Critical Reading	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics 11 Cr. Hrs.

Notes: Must complete 3 semester hours in mathematics at the pre-calculus, algebra (MTH 112) or finite math (MTH 110) level or above. Students must complete 8 semester hours in the natural sciences, which must include laboratory experiences. (Prerequisites and/or developmental courses may be required prior to enrolling in these courses).

In addition to mathematics, disciplines in the natural sciences include: astronomy, biological sciences, chemistry, geology, physical geography, earth science, physics, and physical science.

Course	Title	Cr. Hrs.

BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physiology I	4
BIO202	Human Anatomy & Physiology II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH116	Mathematical Applications	3
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	General Physics with Calculus I	4
PHY214	General Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 12 Cr. Hrs.

Notes: Must complete 3 semester hours in history and at least 6 semester hours in other disciplines in the social and behavioral sciences. Social and behavioral sciences include, but are not limited to: anthropology, economics, geography, political science, psychology, and sociology.*

**Must complete a 6-semester hour sequence in history.*

Course	*Title*	*Cr. Hrs.*
ECO231	Macroeconomics	3
ECO232	Microeconomics	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth & Dev	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses 20 Cr. Hrs. (18 required, 2 institutional)

Note: To satisfy Area V requirements, The Associate in Arts degree plan requires 15 additional hours from Areas II and IV in addition to CIS146. The same courses cannot be used to satisfy requirements in multiple areas. Students completing courses that have been approved for the General Studies Curriculum and are appropriate to their major and/or degree program may transfer these courses with credit applicable to their degree program among two-year and four-year colleges and universities.

Institutional Requirements (2 credits):

***Note:** ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AA Degree Cr. Hrs. 61

Associate in Science - AS

A student enrolled at Drake State in an Associate in Science degree program in General Studies must complete 64 semester hours of general education requirements distributed among four core discipline areas (Areas I - IV) to satisfy the requirements for graduation and to receive the Associate in Science degree.

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*

ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 12 Cr. Hrs.

Notes: Must complete 3 semester hours in literature and 3 semester hours in fine arts. The remaining semester hours are to be selected from humanities and/or fine arts.*

Humanities and fine arts disciplines include but are not limited to: area/ethnic studies, art and art history, foreign languages, music and music history, philosophy, ethics, religious studies, and speech. (Prerequisites and/or developmental courses may be required prior to enrolling in these courses).

**Must complete a 6-semester hour sequence in literature.*

Course Title		*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ART204	Art History II	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
RDG114	Critical Reading	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals/Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics 11 Cr. Hrs.

Notes: Must complete 3 semester hours in mathematics at the pre-calculus, algebra (MTH 112) or finite math (MTH 110) level or above. Students must complete 8 semester hours in the natural sciences, which must include laboratory experiences.

In addition to mathematics, disciplines in the natural sciences include: astronomy, biological sciences, chemistry, geology, physical geography, earth science, physics, and physical science.

Course Title		*Cr. Hrs.*
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO 120	Medical Terminology	3
BIO201	Human Anatomy & Physiology I	4
BIO202	Human Anatomy & Physiology II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH116	Mathematical Applications	3
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	General Physics with Calculus I	4
PHY214	General Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 12 Cr. Hrs.

Notes: Must complete 3 semester hours in history and at least 6 semester hours in other disciplines in the social and behavioral sciences. Social and behavioral sciences include, but are not limited to: anthropology, economics, geography, political science, psychology, and sociology.*

**Must complete a 6-semester hour sequence either in history.*

Course	*Title*	*Cr. Hrs.*
ECO231	Macroeconomics	3
ECO232	Microeconomics	3
HIS121	World History I	3
HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth & Dev	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses 23 Cr. Hrs. (21 required, 2 institutional)

To satisfy Area V requirements, the Associate in Science degree plan requires 18 additional hours from Area III in addition to CIS146. The same courses cannot be used to satisfy requirements in multiple areas. Students completing courses that have been approved for the General Studies Curriculum and are appropriate to their major and/or degree program may transfer these courses with credit applicable to their degree program among two-year and four-year colleges and universities.

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AS Degree Cr. Hrs. 64

General Education - STC

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3

Area III: Natural Sciences and Mathematics 7 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
MTH112	Pre-Calculus Algebra	3
BIO103	Principles of Biology I	4

Area IV: History, Social and Behavioral Sciences 6 Cr. Hrs.

PSY200	General Psychology	3
HIS101	Western Civilization I	3

Area V: Pre-professional, Major and Elective Courses 0 Cr. Hrs.

Total STC Credit Hours 22

HEALTH SCIENCES TECHNOLOGY

Medical Assistant

The Medical Assistant Program is intended to prepare students to provide patient care in physician's offices, minor emergency centers, long-term care facilities, and other types of free-standing medical clinics. In the clinical setting, the medical assistant provides assistance to the physician during assessment and examination of patients, treatment interventions, and in-office diagnostic protocols. Students in this program will learn to perform physical assessments, take medical histories, take and record vital signs, administer

medications, perform venipuncture, and interpret basic laboratory results.

Medical Assistants are also prepared to assume office administrative roles in physician's offices, including scheduling procedures, billing protocols, coding mechanisms, typing of medical correspondence utilizing appropriate medical terminology, office accounting procedures, and insurance processing.

Medical Assistant - AAS

Area I: Written Composition 6 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3
ENG102	English Comp. II	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Note: If taking SPH or SPA, must take additional three credit hours of Humanities.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO201	Human Anatomy & Physiology I	4
BIO202	Human Anatomy & Physiology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Note: PSY210 prerequisite waived.

Course	*Title*	*Cr. Hrs.*
ECO231	Macroeconomics	3
ECO232	Microeconomics	3
GEO100	World Regional Geography	3
HIS101	Western Civilization I	3
HIS102	Western Civilization II	3
HIS121	World History I	3

HIS122	World History II	3
HIS201	US History I	3
HIS202	US History II	3
POL200	Intro to Political Science	3
PSY200	General Psychology	3
PSY210	Human Growth and Development	3
SOC200	Intro to Sociology	3

Area V: Pre-professional, Major and Elective Courses 42 Cr. Hrs. (40 major core, 2 institutional)

Course	*Title*	*Cr. Hrs.*
BIO120	Medical Terminology	3
MAT102	Medical Assisting Theory I	3
MAT103	Medical Assisting Theory II	3
MAT111	Clinical Procedures I for the Medical Assistant	3
MAT120	Medical Administrative Procedures I	3
MAT121	Medical Administrative Procedures II	3
MAT125	Laboratory Procedures I for the Medical Assistant	3
MAT200	Management of Office Emergencies	2
MAT211	Clinical Procedures II for the Medical Assistant	3
MAT215	Laboratory Procedures II for the Medical Assistant	3
MAT216	Pharmacology for the Medical Office	4
MAT220	Medical Office Insurance	3
MAT228	Medical Assisting Review Course	1
MAT229	Medical Assisting Preceptorship	3

General Electives 0 Cr. Hrs.

MAT227	Special Topics in Medical Assisting	1
MAT239	Phlebotomy Preceptorship	3

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 64

Medical Assistant - CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Note: If taking SPH or SPA, must take additional three credit hours of Humanities.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 10 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
CIS146	Microcomputer Applications	3
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO201	Human Anatomy & Physiology I	4
BIO202	Human Anatomy & Physiology II	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
GEO101	Principles of Physical Geography I	4
GEO102	Principles of Physical Geography II	4
PHS111	Physical Science I	4
PHS112	Physical Science II	4
PHY120	Intro to Physics	4
PHY201	General Physics I	4
PHY202	General Physics II	4
PHY213	Gen. Physics with Calculus I	4
PHY214	Gen. Physics with Calculus II	4

Area IV: History, Social and Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 29 Cr. Hrs.
(27 major core, 2 institutional)

Course	*Title*	*Cr. Hrs.*
MAT102	Medical Assisting Theory I	3
MAT103	Medical Assisting Theory II	3
MAT111	Clinical Procedures I for the Medical Assistant	3
MAT120	Medical Administrative Procedures I	3
MAT121	Medical Administrative Procedures II	3
MAT125	Laboratory Procedures I for the Medical Assistant	3
MAT200	Management of Office Emergencies	2
MAT211	Clinical Procedures II for the Medical Assistant	3
MAT216	Medical Pharmacology for the Medical Office	4

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours 45

Medical Assistant- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 27 Cr. Hrs.
(27major core)

Course	*Title*	*Cr. Hrs.*
BIO120	Medical Terminology	3
MAT102	Medical Assisting Theory I	3
MAT103	Medical Assisting Theory II	3
MAT111	Clinical Procedures I for the Medical Assistant	3
MAT120	Medical Administrative Procedures I	3

MAT121	Medical Administrative Procedures II	3
MAT125	Laboratory Procedures I for the Medical Assistant	3
MAT200	Management of Office Emergencies	2
MAT216	Medical Pharmacology for the Medical Office	4

Total STC Credit Hours 27

Medical Assistant Administrative- STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs. (9 major core)

Course	*Title*	*Cr. Hrs.*
MAT120	Medical Administrative Procedures I	3
MAT121	Medical Administrative Procedures II	3
MAT220	Medical Office Insurance	3

Total STC Credit Hours 9

Phlebotomy - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

Area IV: History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 9 Cr. Hrs.

MAT125	Laboratory Procedures I for the Medical Assistant	3
MAT215	Laboratory Procedures II for the Medical Assistant	3
MAT239	Phlebotomy Preceptorship	3

Total STC Credit Hours 9

Nursing

A program that generally prepares individuals in the knowledge, techniques and procedures for promoting health, providing care for sick, disabled, infirmed, or other individuals or groups. Includes instruction in the administration of medication and treatments, assisting a physician during treatments and examinations, referring patients to physicians and other health care specialists, and planning education for health maintenance.

Registered Nursing - AAS

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 6 Cr. Hrs.

Note: Must take 1 SPH and 1 Humanities course.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3

ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
PHL210	Ethics for the Health Sciences	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	3
SPA102	Introductory Spanish II	3
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 15 Cr. Hrs.

Note: MTH100 or higher, BIO201, BIO202, BIO220 are required.

Course	*Title*	*Cr. Hrs.*
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO201	Human Anatomy & Physiology I	4
BIO202	Human Anatomy & Physiology II	4
BIO220	Microbiology	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Note: PSY210 is required. (Prerequisite waived)

Course	*Title*	*Cr. Hrs.*
PSY210	Human Growth and Development	3

Area V: Pre-professional, Major and Elective Courses 41 Cr. Hrs. (39 major core, 2 institutional)

Course	*Title*	*Cr. Hrs.*
NUR112	Fundamental Concepts of Nursing	7
NUR113	Nursing Concepts I	8
NUR114	Nursing Concepts II	8
NUR115	Evidence Based Clinical Reasoning	2
NUR211	Advanced Nursing Concepts	7
NUR221	Advanced Evidence Based Clinical Reasoning	7

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 68

Nursing Mobility - AAS

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 6 Cr. Hrs.

Note: Must take 1 SPH and 1 Humanities course.

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3

ENG271	World Literature I	3
ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
PHL210	Ethics for the Health Sciences	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 15 Cr. Hrs.

Note: MTH100 or higher, BIO201, BIO202, BIO220 are required.

Course	*Title*	*Cr. Hrs.*
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO201	Human Anatomy & Physiology I	4
BIO202	Human Anatomy & Physiology II	4
BIO220	Microbiology	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Note: PSY210 is required. (Prerequisite waived)

Course	*Title*	*Cr. Hrs.*
PSY210	Human Growth and Development	3

Area V: Pre-professional, Major and Elective Courses 26 Cr. Hrs. (24 major core, 2 institutional)

Course	*Title*	*Cr. Hrs.*
NUR209	Concepts for Healthcare Transition Students	10
NUR211	Advanced Nursing Concepts 1	7
NUR221	Advanced Evidence-Based Clinical Reasoning	7

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours 53

Practical Nursing- CER

Area I: Written Composition 3 Cr. Hrs.

Course	*Title*	*Cr. Hrs.*
ENG101	English Comp. I	3

Area II: Humanities and Fine Arts 3 Cr. Hrs.

Note: SPH107 is required

Course	*Title*	*Cr. Hrs.*
ART100	Art Appreciation	3
ART203	Art History I	3
ENG251	American Literature I	3
ENG252	American Literature II	3
ENG261	English Literature I	3
ENG262	English Literature II	3
ENG271	World Literature I	3

ENG272	World Literature II	3
MUS101	Music Appreciation	3
PHL206	Ethics & Society	3
PHL210	Ethics for the Health Sciences	3
REL100	History of World Religions	3
REL151	Survey of Old Testament	3
REL152	Survey of New Testament	3
SPA101	Introductory Spanish I	4
SPA102	Introductory Spanish II	4
SPH106	Fundamentals of Oral Communication	3
SPH107	Fundamentals of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Intro to Theater	3

Area III: Natural Sciences and Mathematics 11 Cr. Hrs.

Note: MTH100 or higher, BIO201, and BIO202are required.

Course	*Title*	*Cr. Hrs.*
MTH100	Intermediate College Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry I	3
MTH115	Pre-Calculus Algebra & Trigonometry	4
MTH120	Calculus and Its Application	3
MTH125	Calculus I	4
MTH126	Calculus II	4
MTH227	Calculus III	4
BIO201	Human Anatomy & Physiology I	4
BIO202	Human Anatomy & Physiology II	4
BIO220	Microbiology	4

Area IV: History, Social and Behavioral Sciences 3 Cr. Hrs.

Note: PSY210 is required. (Prerequisite waived)

Course	*Title*	*Cr. Hrs.*
PSY210	Human Growth and Development	3

Area V: Pre-professional, Major and Elective Courses 27 Cr. Hrs.

(25 major core, 2 institutional)

Course	*Title*	*Cr. Hrs.*
NUR112	Fundamental Concepts of Nursing	7
NUR113	Nursing Concepts I	8
NUR114	Nursing Concepts II	8
NUR115	Evidence Based Clinical Reasoning	2

Institutional Requirements (2 credits):

Note: *ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.*

Course	*Title*	*Cr. Hrs.*
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total CER Credit Hours 47

Nursing Assistant - STC

Area I: Written Composition 0 Cr. Hrs.

Area II: Humanities and Fine Arts 0 Cr. Hrs.

Area III: Natural Sciences and Mathematics 0 Cr. Hrs.

History, Social & Behavioral Sciences 0 Cr. Hrs.

Area V: Pre-professional, Major and Elective Courses 10 Cr. Hrs.

NAS/HHA111	Fundamentals of Long Term Care	6
NAS112	Fundamentals of Long-Term Care Clinical	2
NAS115	CPR and First Aid	2

Total STC Credit Hours 10

COURSE DESCRIPTIONS

Advanced Manufacturing Technology

Electrical (ELT)

ADM101 – Precision Measurement – (3 cr. hrs.)
This course covers the use of precision measurement instruments utilized in inspection. In addition, basic print reading techniques reverse engineering, and related industry standards required in advanced manufacturing disciplines are covered. Upon completion, students should be able to demonstrate correct use of precision measuring instruments, interpret basic prints and apply basic reverse engineering techniques. PREREQUISITE: As required by program.
Note: This is a suitable substitute for MTT 127.

ADM105 – Fluid Systems – (3 cr. hrs.)
This course includes the fundamental concepts and theories for the safe operation of hydraulic and pneumatic systems used with industrial production equipment. Topics include the physical concepts, theories, laws, air flow characteristics, actuators, valves, accumulators, symbols, circuitry, filters, servicing safety, preventive maintenance and the application of these concepts to perform work. Upon completion, students should be able to service and perform preventive maintenance functions on hydraulic and pneumatic systems. PREREQUISITE: As required by program.

ADM106 – Quality Control Concepts – (3 cr. hrs.)
This course provides an overview of the materials and processes and quality assurance topics used in commercial and specialized manufacturing products. Emphasis is placed on process evaluation techniques that can be extrapolated to other system areas such as new products and new technology. Emphasis is also placed on quality assurance including the history of the quality movement, group problem solving, and statistical methods such as statistical process control (SPC), process capability studies, and the concepts associated with lean manufacturing. PREREQUISITE: As required by program.

ADM111 – Manufacturing Safety Practices - (3 cr. hrs.)
This course is an introduction to general issues, concepts, procedures, hazards, and safety standards found in an industrial environment. This safety course is to make technicians aware of safety issues associated with their changing work environment and attempt to eliminate industrial accidents. This course will offer credentialing for NCCER Core and OSHA 10 hour. PREREQUISITE: As required by program.

ADM283 – CO-OP - (3 cr. hrs.)
These courses constitute a series wherein the student works on a part-time basis in a job directly related to advanced manufacturing. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting.

ELT108 – DC Fundamentals - (3 cr. hrs.)
This course is designed to provide students with a working knowledge of basic direct current (DC) electrical principles. Topics include safety, basic atomic structure and theory, magnetism, conductors, insulators, use of Ohm's law to solve for voltage, current, and resistance, electrical sources, power, inductors, and capacitors. Students will perform lockout/tagout procedures, troubleshoot circuits and analyze series, parallel, and combination DC circuits using the electrical laws and basic testing

equipment to determine unknown electrical quantities. This course is also taught as ILT 160. This is a **CORE** course. PREREQUISITE: As required by program.

ELT109 – AC Fundamentals - (3 cr. hrs.)
This course is designed to provide students with a working knowledge of basic alternating current (AC) electrical principles. Topics include basic concepts of electricity, electrical components, basic circuits, measurement instruments, the laws of alternating current, and electrical safety with lockout procedures. Hands on laboratory exercises are provided to analyze various series, parallel, and combination alternating current circuit configurations containing resistors, inductors, and capacitors. Upon course completion, students will be able to describe and explain alternating current circuit fundamentals such as RLC circuits, impedance, phase relationships, and power factors. They should also be able to perform fundamental tasks associated with troubleshooting, repairing, and maintaining industrial AC systems. This course is also taught as ILT161. This is a **CORE** course. PREREQUISITE: As required by program.

ELT114 – Residential Wiring Methods - (3 cr. hrs.)
This course is a study of residential wiring practices and methods, the NEC requirements and residential blueprint interpretations. This is a **CORE** course. PREREQUISITE: As required by program.

ELT115 – Residential Wiring Methods II - (3 cr. hrs.)
This course is a study of residential wiring practices and methods, the NEC requirements and residential blueprint interpretations. This is a **CORE** course. PREREQUISITE: As required by program

ELT117 – AC/DC Machines - (3 cr. hrs.)
This course covers the theory and operation of DC motors single and three phase AC motors and the labs will reinforce this knowledge. Emphasis is placed on the various types of single and three phase motors, wiring diagrams, starting devices, and practical application in the lab. This is a **CORE** course. PREREQUISITE: As required by program

ELT118 – Commercial/Industrial Wiring I - (3 cr. hrs.)
This course focuses on principles and applications of commercial and industrial wiring. Topics include, electrical safety practices, an overview of National Electric Code requirements as applied to commercial and industrial wiring, conduit bending, circuit design, pulling cables, transformers, switch gear, and generation principles. This is a **CORE** course. PREREQUISITE: As required by program.

ELT209 – Motor Controls I - (3 cr. hrs.)
This course is a study of the construction, operating characteristics, and installation of different motor control circuits and devices. Emphasis is placed on the control of three phase AC motors. This course covers the use of motor control symbols, magnetic motor starters, running overload protection, pushbutton stations, multiple control stations, two wire control, three wire control, jogging control, sequence control, and ladder diagrams of motor control circuits. Upon completion, students should be able to understand the operation of motor starters, overload protection, interpret ladder diagrams using pushbutton stations and understand complex motor control diagrams. This is a **CORE** course. PREREQUISITE: As required by program.

ELT219 – Fluid Power Systems – (3 cr. hrs.)
This course includes the fundamental concepts and theories for the safe operation of hydraulic and pneumatic systems used with industrial production equipment. Topics include the physical concepts,

theories, laws, air flow characteristics, actuators, valves, accumulators, symbols, circuitry, filters, servicing safety, and preventive maintenance and the application of these concepts to perform work. Upon completion, students should be able to service and perform preventive maintenance functions on hydraulic and pneumatic systems. PREREQUISITE: As required by program.

ELT230 – Programmable Controls – (6 cr. hrs.)
This state-of-the-art course includes the fundamental principles of programmable logic controls (PLC's) including hardware, programming and program design. Emphasis is placed on hardwiring associated with PLC, different options available with most PLC's basic ladder logic programming, developing working programs, timers, counters, different special functions, and designing programs from existing hardwired systems. Upon completion, students should be able to develop programs, load programs into PLC's and troubleshoot the system. PREREQUISITE: As required by program.

ELT231 - Introduction to Programmable Controllers – (3cr. hrs.)
This course provides an introduction to programmable logic controllers. Emphasis is placed on, but not limited to, the following: PLC hardware and software, numbering systems, installation, and programming. Upon completion, students must demonstrate their ability by developing, loading, debugging, and optimizing PLC programs. NOTE: This course is also taught as AUT 114, ATM 211, ENT 204, INT 184, ILT 194, IAT 160, & IET 231. PREREQUISITE: As required by program.

ELT241 - National Electric Code – (3 cr. hrs.)
This course introduces the students to the National Electric Code and text and teaches the student how to find needed information within this manual. Emphasis is placed on locating and interpreting needed information within the NEC code manual. Upon completion, students should be able to locate, with the NEC code requirements for a specific electrical installation. PREREQUISITE: As required by program.

ELT253 – Industrial Robotics - (3 cr. hrs.)
This course provides instruction in concepts and theories for the operation of robotic servo motors and power systems used with industrial robotic equipment. Emphasis is on the application of the computer to control power systems to perform work. Student competencies include understanding of the functions of hydraulic, pneumatic, and electrical power system components, ability to read and interpret circuitry for proper troubleshooting and ability to perform preventative maintenance. PREREQUISITE: As required by program.

ELT254 – Robot Maintenance and Troubleshooting (3 cr. hrs.)
This course introduces principle concepts troubleshooting and maintenance of robots. Topics include, recognize, and describe major robot component. Students will learn to diagnose robot mechanical problems to the component level, replacement of mechanical components and perform adjustments, troubleshooting class 1, 2, and 3 faults, to manipulate I/O for the robot, and periodic and preventive maintenance. Students will learn how to safely power up robots for complete shutdown and how to manipulate robots using the teach pendant. Upon completion students will be able to describe the various robot classifications, characteristics, explain system operations of simple robots, and maintain robotic systems. PREREQUISITE: As required by program.

INT126 – Preventive Maintenance – (3 cr. hrs.)
This course focuses on the concepts and applications of preventive maintenance. Topics include the introduction of alignment equipment, job safety, tool safety, preventive maintenance concepts, procedures, tasks, and predictive maintenance concepts. Upon course completion, students will

demonstrate the ability to apply proper preventive maintenance and explain predictive maintenance concepts. PREREQUISITE: As required by program.

Engineering Design (DDT)

ADM101 – Precision Measurement – (3 cr. hrs.)
This course covers the use of precision measurement instruments utilized in inspection. In addition, basic print reading techniques reverse engineering, and related industry standards required in advanced manufacturing disciplines are covered. Upon completion, students should be able to demonstrate correct use of precision measuring instruments, interpret basic prints and apply basic reverse engineering techniques. PREREQUISITE: As required by program. Note: This is a suitable substitute for MTT 127.

ADM102 – Computer Aided Design – (3 cr. hrs.)
This course is an introduction to basic Computer Aided Design functions and techniques using "hands-on" applications. Topics include terminology, hardware, basic computer aided design (CAD) and operating system functions, file manipulation, industry standards for CAD drawings, and basic CAD software applications in producing softcopy and hardcopy. At the completion of this course, students should be proficient in the production of two-dimensional drawings that meets technical standards including setting up print styles and exporting drawings to the appropriate format. PREREQUISITE: As required by program. Note: This course is a suitable substitute for DDT 104.

ADM106 – Quality Control Concepts – (3 cr. hrs.)
This course provides an overview of the materials and processes and quality assurance topics used in commercial and specialized manufacturing products. Emphasis is placed on process evaluation techniques that can be extrapolated to other system areas such as new products and new technology. Emphasis is also placed on quality assurance including the history of the quality movement, group problem solving, and statistical methods such as statistical process control (SPC), process capability studies, and the concepts associated with lean manufacturing. PREREQUISITE: As required by program.

ADM107 – CAD Concepts – (3 cr. hrs.)
This course provides an introduction of Computer-Aided Drafting (CAD) techniques and terminology. Concepts to include CAD software, and skills necessary to perform the basic computer aided drafting functions. Related lab projects are developed from CAD to reinforce knowledge of various shop drawing concepts, software commands, and file management that will be used in the Computer Integrated Manufacturing (CIM). The course will provide an overview of CIM which will include the study of manufacturing planning, integration, and implementation of automation. This course explores manufacturing history, individual processes, systems, and careers. In addition to technical concepts, the course incorporates finance, ethics, and engineering design. PREREQUISITE: As required by program.

ADM108 – Intro to 3D Modeling – (3 cr. hrs.)
This course introduces the fundamentals of 3D parametric CAD software for the creation of parts, assemblies and drawings. Students will use SolidWorks software to sketch, create, edit, and constrain 3D solid models, as well as create and dimension 2D drawings per ASME standards from these models. The course focuses not only on the individual tools available in the software, but also on the best approach to the use of these tools, so that the design progresses in a logical manner, producing an effective and efficient design process. The elements of global collaboration are introduced along with printing concepts. A hands-on approach is used in this class to build a foundation for the continued training and application. PREREQUISITE: As required by program.

ADM110 – Blueprint Reading – (3 cr. hrs.)
This course is designed to provide students with a comprehensive understanding of blueprint reading. Topics include identifying types of lines and symbols used in mechanical drawings; recognition and interpretation of various types of views, tolerance, and dimensions. PREREQUISITE: As required by program.

ADM111 – Manufacturing Safety Practices - (3 cr. hrs.)
This course is an introduction to general issues, concepts, procedures, hazards, and safety standards found in an industrial environment. This safety course is to make technicians aware of safety issues associated with their changing work environment and attempt to eliminate industrial accidents. This course will offer credentialing for NCCER Core and OSHA 10 hour. PREREQUISITE: As required by program.

ADM114 – Design Innovation - (3 cr. hrs.)
This course introduces students to concepts that enable them to think like a designer when approaching architectural, engineering and additive manufacturing tasks. Emphasis will be placed on design and problem-solving skills when working independently, or with a team. This course focuses on giving students exposure to creativity, problem solving skills, and the design processes in which a design-centered approached will be employed to develop innovated solutions. This course includes components to develop basic skills to express innovated solutions to design problems with the application of projects, drawings, as well as oral and written communication skills. Students will be introduced to related computer-based tools used by architect, engineers, and design manufacturers. (e.g., spreadsheet, word processing, presentation software, and Internet). PREREQUISITE: As required by program.

ADM 128 – Plastic Material Processes - (3 cr. hrs.)
This course in plastic materials and processes includes the basic principles and methodology of various material types and manufacturing processes. Comparison of selecting the best type of manufacturing for product will be discussed. Student will learn proper instruction on safety operations, set-up and maintenance and production of parts on a Fused Deposition Manufacturing (FDM) printer or Rapid Prototype (RP) System. Emphasis is directed on 3D modeling software program (such as Solid works) and Insight software 2/3D sketches, RP manufacturing technologies, FDM usages and processing with various types of manufactured plastics. Upon completion, students should be able to discuss and understand the significance of materials properties and structure, basic rapid prototyping, and express and interpret material specifications and be able to select the best process for the type of product being produced. PREREQUISITE: As required by program.

ADM155 – Manufacturing Projects – (3cr. hrs.)
This is an introduction to project base learning. This course will involve research, team skills, the collaboration of trades, outsourcing, manufacturing management that emphasizes synthesis through collaborative learning. Students integrate and apply previous knowledge, skills, and experiences they learned in their major and other academic courses to complete individual & team-based projects. The course emphasizes communication skills, critical thinking, problem-solving, computer literacy, and teaming skills.

ADM215 – Geometric Dimensioning and Tolerancing - (3 cr. hrs.)
This course is designed to teach fundamental concepts of size description by geometric methods including appropriate engineering controls. Emphasis is placed on the drawing and application of

common geometric dimensioning and tolerancing symbols to engineering drawings as designated by the latest ANSI/ASME Standards. Upon completion, students should be able to use geometric dimensioning and tolerancing symbols in applying size information and manufacturing controls to working drawings. PREREQUISITE: As required by program.

ADM216 – 3D Graphics and Animation - (3 cr. hrs.)
This course is design to challenge the imagination of the student in a 3-dimensional problem-solving environment. The student will be given a basic introduction to the concepts of 3D design and animation, then apply those concepts to a design project. Upon completion, students should be able to create and animate objects in a 3-dimensional environment. PREREQUISITE: As required by program.

ADM260 – Portfolio - (3 cr. hrs.)
This course includes the preparation of technical and or architectural drawings for a portfolio presentation and a resume for portfolio presentation. Upon completion, students should be able to prepare and produce a resume and portfolio for presentation in both hard copy as well as electronic copy. PREREQUISITE: As required by program.

ADM261 – Reverse Engineering - (3 cr. hrs.)
This course emphasizes reverse engineering techniques and quality control inspection of parts employing 3D printing, scanning, and Coordinate Measuring Machine (CMM technologies). The emphasis is on using applicable software to convert scanned images from point cloud data into 3D models. The process will allow using software to clean up point cloud data, create airtight 3D models, run a comparison analysis of collected data to solid, improve or reproduce a scanned part, print the part and then perform an inspection using CMM probe for additional analysis and comparison. PREREQUISITE: As required by program.

ADM283 – CO-OP - (3 cr. hrs.)
These courses constitute a series wherein the student works on a part-time basis in a job directly related to advanced manufacturing. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting. PREREQUISITE: As required by program.

DDT130 – Fundamentals of Drafting for Related Trades - (3 cr. hrs.)
This course covers the theory for an overview of related trades drafting. Topics include civil, piping, electronic and welding drawings. Upon completion, students should be able to identify the basic information used to produce drawings related to these fields. PREREQUISITE: As required by program.

DDT144 - Basic 3D Modeling – (3 cr. Hrs.)
This course is an introduction to 3D solid modeling techniques utilizing feature-based, constraint-based parametric design. This course encourages the student to visualize parts in which they will design. Upon completion of the course students should be able to create basic 3D models and 2D working drawings. Prerequisite: DDT124 and DDT128.

DDT226 – Technical Illustration - (3 cr. hrs.)
This course provides the student with various methods of illustrating structures and machine parts. Topics include axonometric drawings; exploded assembly drawings; one point, two point, and three point perspectives, surface textures, and renderings. Upon completion, students should be able to

produce drawings and illustrations using the previously described methods. PREREQUISITE: DDT111, DDT124, DDT235.

DDT233 – Intermediate 3D Modeling - (3 cr. hrs.)
This course emphasizes the more advanced techniques in 3D solid modeling. It covers advanced features of part creation, part editing, and analysis. Some techniques that will be discussed are: lofting, sweeping, sheet metal part creation, interference checking and stress analysis. Upon completion of the course students should be able to create advanced 3D models and perform stress analysis/interference checking. PREREQUISITE: DDT111, DDT124.

DDT235 – Specialized CAD - (3 cr. hrs.)
This course allows the student to plan, execute, and present results of individual projects in Specialized CAD topics. Emphasis is placed on enhancing skill attainment in Specialized CAD skill sets. The student will be able to demonstrate and apply competencies identified by the instructor. PREREQUISITE: Permission of instructor.

DDT239 – Independent Studies - (3 cr. hrs.)
This course provides practical application of prior attained skills and experiences as selected by the instructor for the individual student. Emphasis is placed on applying knowledge from prior courses toward the solution of individual drafting and design problems. With completion of this course, the student will demonstrate the application of previously attained skills and knowledge in the solution of typical drafting applications and problems. PREREQUISITE: Permission of instructor.

WKO110 – NCCER Core – (3 cr. hrs.)
This course is designed to provide students with knowledge and skills related to multi-craft technicians in a variety of fields. Information in this course is based on the National Center for Construction Education and Research (NCCER) core curriculum and prepares students to test for the NCCER credential. PREREQUISITE: As required by program.

Machine Tool (MTT)

ADM101 – Precision Measurement – (3 cr. hrs.)
This course covers the use of precision measurement instruments utilized in inspection. In addition, basic print reading techniques reverse engineering, and related industry standards required in advanced manufacturing disciplines are covered. Upon completion, students should be able to demonstrate correct use of precision measuring instruments, interpret basic prints and apply basic reverse engineering techniques. PREREQUISITE: As required by program. Note: This is a suitable substitute for MTT 127.

ADM102 – Computer Aided Design – (3 cr. hrs.)
This course is an introduction to basic Computer Aided Design functions and techniques using "hands-on" applications. Topics include terminology, hardware, basic computer aided design (CAD) and operating system functions, file manipulation, industry standards for CAD drawings, and basic CAD software applications in producing softcopy and hardcopy. At the completion of this course, students should be proficient in the production of two-dimensional drawings that meets technical standards including setting up print styles and exporting drawings to the appropriate format. PREREQUISITE: As required by program.
Note: This course is a suitable substitute for DDT 104.

ADM106 – Quality Control Concepts – (3 cr. hrs.)
This course provides an overview of the materials and processes and quality assurance topics used in commercial and specialized manufacturing products. Emphasis is placed on process evaluation techniques that can be extrapolated to other system areas such as new products and new technology. Emphasis is also placed on quality assurance including the history of the quality movement, group problem solving, and statistical methods such as statistical process control (SPC), process capability studies, and the concepts associated with lean manufacturing. PREREQUISITE: As required by program.

ADM110 – Blueprint Reading – (3 cr. hrs.)
This course is designed to provide students with a comprehensive understanding of blueprint reading. Topics include identifying types of lines and symbols used in mechanical drawings; recognition and interpretation of various types of views, tolerance, and dimensions. PREREQUISITE: As required by program.

ADM111 – Manufacturing Safety Practices - (3 cr. hrs.)
This course is an introduction to general issues, concepts, procedures, hazards, and safety standards found in an industrial environment. This safety course is to make technicians aware of safety issues associated with their changing work environment and attempt to eliminate industrial accidents. This course will offer credentialing for NCCER Core and OSHA 10 hour. PREREQUISITE: As required by program.

ADM283 – CO-OP - (3 cr. hrs.)
These courses constitute a series wherein the student works on a part-time basis in a job directly related to advanced manufacturing. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting. PREREQUISITE: As required by program.

MTT107 – Machining Calculations I - (3 cr. hrs.)
This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT125 – Introduction to Machining Technology – (3 cr. Hrs.)
This course introduces precision machining processes as they relate to the metalworking industry. Topics include machine shop safety, precision measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform basic measurement and layout, drilling, sawing, turning, and milling to make parts and tools. PREREQUISITE: As required by program.

MTT128 – Geometric Dimensioning and Tolerancing I - (3 cr. hrs.)
This course is designed to teach students how to interpret engineering drawings using modern conventions, symbols, datums, datum targets, and projected tolerance zones. Special emphasis is placed upon print reading skills, and industry specifications and standards. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT129 – Lathe Operations (6 cr. hrs.)
This course includes more advanced lathe practices such as set-up procedures, work planning, inner- and outer-diameter operations, and inspection and process improvement. Additional emphasis is placed on safety procedures. Upon completion, students will be able to apply advanced lathe techniques. MTT134 AND MTT135 are suitable substitutes for MTT129. This course is aligned with NIMS standards. PREREQUISITE: As required by program.

MTT134 - Lathe Operations I – (3 cr. hrs.)
This course includes more advanced lathe practices such as set-up procedures, work planning, inner- and outer-diameter operations, and inspection and process improvement. Additional emphasis is placed on safety procedures. Upon completion, students will be able to apply advanced lathe techniques. MTT 134/135 are suitable substitutes for MTT 129. This course is aligned with NIMS standards. PREREQUISITE: As required by program.

MTT135 – Lathe Operations I Lab – (3 cr. hrs.)
This course includes more advanced lathe practices such as set-up procedures, work planning, inner- and outer-diameter operations, and inspection and process improvement. Additional emphasis is placed on safety procedures. Upon completion, students will be able to apply advanced lathe techniques. MTT 134/135 are suitable substitutes for MTT 129. This course is aligned with NIMS standards. PREREQUISITE: As required by program.

MTT139 – Basic Computer Numerical Control - (3 cr. hrs.)
This course introduces the concepts and capabilities of computer numeric control (CNC) machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to develop a basic CNC program to safely operate a lathe and milling machine. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT140 – Basic Computer Numerical Control Turning Programming I - (3 cr. hrs.)
This course covers concepts associated with basic programming of a computer numerical control (CNC) turning center. Topics include basic programming characteristics, motion types, tooling, workholding devices, setup documentation, tool compensations, and formatting. Upon completion, students should be able to write a basic CNC turning program that will be used to produce a part. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT141 – Basic Computer Numeric Control Milling Programming I - (3 cr. hrs.)
This course covers concepts associated with basic programming of a computer numerical control (CNC) milling center. Topics include basic programming characteristics, motion types, tooling, workholding devices, setup documentation, tool compensations, and formatting. Upon completion, students should be able to write a basic CNC milling program that will be used to produce a part. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT147 – Introduction to Machine Shop I - (3 cr. hrs.)
This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, saws, milling machines, bench grinders, and layout instruments. Upon completion, students will be able to perform the basic operations of measuring, layout, drilling, sawing, turning, and milling. This is a CORE course. MTT 100 is a suitable substitute for MTT 147/148. PREREQUISITE: As required by program.

MTT148 – Introduction to Machine Shop I Lab - (3 cr. hrs.)
This course provides practical application of the concepts and principles of machining operations learned in MTT 147. Topics include machine shop safety, measuring tools, lathes, saws, milling machines, bench grinders, and layout instruments. Upon completion, students will be able to perform the basic operations of measuring, layout, drilling, sawing, turning, and milling. This is a CORE course. MTT 100 is a suitable substitute for MTT 147/148. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT149 – Introduction to Machine Shop II – (3 cr. hrs.)
This course provides additional instruction and practice in the use of measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection of work holding devices, speeds, feeds, cutting tools and coolants. Upon completion, students should be able to perform intermediate level procedures of precision grinding, measuring, layout, drilling, sawing, turning, and milling. This is a CORE course and is aligned with NIMS certification standards. MTT 149/150 are suitable substitutes for MTT 103. PREREQUISITE: As required by program.

MTT150 – Introduction to Machine Shop II Lab – (3 cr. hrs.)
This course provides additional instruction and practice in the use of measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection of work holding devices, speeds, feeds, cutting tools and coolants. Upon completion, students should be able to perform intermediate level procedures of precision grinding, measuring, layout, drilling, sawing, turning, and milling. This is a CORE course and is aligned with NIMS certification standards. MTT 149/150 are suitable substitutes for MTT 103. PREREQUISITE: As required by program.

MTT219 – Computer Numerical Control Graphics: Turning - (3 cr. hrs.)
This course covers techniques involved in writing a program for a multi-axis computerized numeric control (CNC) turning machine using computer assisted manufacturing (CAM) software. In addition, CNC turning machine setup, programming, and operation are detailed. Upon completion, the student should be able to set up, program, and operate a 3-axis CNC turning machine to produce a 2½-axis part using CAM software. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT220 – Computer Numerical Control Graphics: Milling - (3 cr. hrs.)
This course covers techniques involved in writing a program for a multi-axis computerized numeric control (CNC) milling machine using computer assisted manufacturing (CAM) software. In addition, CNC milling machine setup, programming, and operation are detailed. Upon completion, the student should be able to set up, program, and operate a 3-axis CNC milling machine to produce a 2½-axis part using CAM software. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

Manufacturing Skills Standards Council (MSSC) Certification

WKO131 – MSSC Safety Course - (3 cr. hrs.)
This course is designed to provide students with knowledge and skills related to safety in a manufacturing environment. Topics covered include

- Work in a safe and productive manufacturing workplace
- Perform safety and environmental inspections
- Perform emergency drills and participate in emergency teams
- Identify unsafe conditions and take corrective action

- Provide safety orientation for all employees
- Train personnel to use equipment safely
- Suggest process and procedures that support safety of work environment
- Fulfill safety and health requirements for maintenance, installation and repair
- Monitor safe equipment and operator performance
- Utilize effective, safety-enhancing workplace practices
- Students completing this course will receive an MSSC certificate in Safety.

WKO132 – MSSC Quality Practice and Measurement Course - (3 cr. hrs.)
This course is designed to provide students with knowledge and skills related to quality practices and measurement in a manufacturing environment. Topics covered include

- Participate in periodic internal quality audit activities
- Check calibration of gages and other data collection equipment
- Suggest continuous improvements
- Inspect materials and product/process at all stages to ensure they meet specifications
- Document the results of quality problems
- Communicate quality problems
- Take corrective actions to restore or maintain quality
- Record process outcomes and trends
- Identify fundamentals of blueprint reading
- Use common measurement systems and precision measurement tools
- This course is equivalent to ADM 106
- Students completing this course will receive an MSSC certificate in quality practices and measurement.

WKO133 – MSSC Manufacturing Processes and Production Course - (3 cr. hrs.)
This course is designed to provide students with knowledge and skills related to manufacturing processes and production in a manufacturing environment. Topics covered include

- Identify customer needs
- Determine resources available for the production process
- Set up equipment for the production process
- Set team production goals
- Make job assignments
- Coordinate work flow with team members and other work groups
- Communicate production and material requirements and product specifications
- Preform and monitor the process to make the product
- Document product and process compliance with customer requirements
- Prepare final product for shipping or distribution
- Students completing this course will receive an MSSC certificate in manufacturing processes and production.

WKO134 – MSSC Maintenance Awareness Course - (3 cr. hrs.)
This course is designed to provide students with knowledge and skills related to maintenance awareness in a manufacturing environment. Topics covered include

- Prepare preventative maintenance and routine repair
- Monitor indicators to ensure correct operations
- Perform all housekeeping to maintain production schedule

- Recognize potential maintenance issues with basic production systems, including knowledge of when to inform maintenance personnel about problems with:
  - electrical systems
  - pneumatic systems
  - hydraulic systems
  - machine automation systems
  - lubrication systems
  - bearings and couplings
- Students completing this course will receive an MSSC certificate in maintenance awareness.

Students completing courses WKO 131, 132, 133 and 134 will receive the Certified Production Technician credential.

Mechatronics

ADM101 – Precision Measurement – (3 cr. hrs.)
This course covers the use of precision measurement instruments utilized in inspection. In addition, basic print reading techniques reverse engineering, and related industry standards required in advanced manufacturing disciplines are covered. Upon completion, students should be able to demonstrate correct use of precision measuring instruments, interpret basic prints and apply basic reverse engineering techniques. PREREQUISITE: As required by program.
Note: This is a suitable substitute for MTT 127.

ADM106 – Quality Control Concepts – (3 cr. hrs.)
This course provides an overview of the materials and processes and quality assurance topics used in commercial and specialized manufacturing products. Emphasis is placed on process evaluation techniques that can be extrapolated to other system areas such as new products and new technology. Emphasis is also placed on quality assurance including the history of the quality movement, group problem solving, and statistical methods such as statistical process control (SPC), process capability studies, and the concepts associated with lean manufacturing. PREREQUISITE: As required by program.

ADM110 – Blueprint Reading – (3 cr. hrs.)
This course is designed to provide students with a comprehensive understanding of blueprint reading. Topics include identifying types of lines and symbols used in mechanical drawings; recognition and interpretation of various types of views, tolerance, and dimensions. PREREQUISITE: As required by program.

ADM111 – Manufacturing Safety Practices - (3 cr. hrs.)
This course is an introduction to general issues, concepts, procedures, hazards, and safety standards found in an industrial environment. This safety course is to make technicians aware of safety issues associated with their changing work environment and attempt to eliminate industrial accidents. This course will offer credentialing for NCCER Core and OSHA 10 hour. PREREQUISITE: As required by program.

ADM283 – CO-OP - (3 cr. hrs.)
These courses constitute a series wherein the student works on a part-time basis in a job directly related to advanced manufacturing. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting. PREREQUISITE: As required by program.

INT101 – DC Fundamentals- (3 cr. hrs.)
This course provides an in-depth study of direct current (DC) electronic theory. Topics include atomic theory, magnetism, properties of conductors and insulators, and characteristics of series, parallel, and series-parallel circuits. Inductors and capacitors are introduced and their effects on DC circuits are examined. Students are prepared to analyze complex DC circuits, solve for unknown circuit variables and to use basic electronic test equipment. This course also provides hands on laboratory exercises to analyze, construct, test, and troubleshoot DC circuits. Emphasis is placed on the use of scientific calculator and the operation of common test equipment used to analyze and troubleshoot DC and to prove the theories taught during classroom instruction. This is a CORE course. PREREQUISITE: As required by program.

INT103 – AC Fundamentals - (3 cr. hrs.)
This course provides an in-depth study of alternating current (AC) electronic theory. Students are prepared to analyze complex AC circuit configurations with resistors, capacitors, and inductors in series and parallel combinations. Topics include electrical safety and lockout procedures, specific AC theory functions such as RLC, impedance, phase relationships, and power factor. Students will be able to define terms, identify waveforms, solve complex mathematical problems, construct circuits, explain circuit characteristics, identify components, and make accurate circuit measurements using appropriate measurement instruments. They should also be able to perform fundamental tasks associated with troubleshooting, repairing, and maintaining industrial AC systems. This is a CORE course. PREREQUISITE: As required by program.

INT118- Fundamentals of Industrial Hydraulics and Pneumatics - (3 cr. hrs.)
This course includes the fundamental concepts and theories for the safe operation of hydraulic and pneumatic systems used with industrial production equipment. Topics include the physical concepts, theories, laws, air flow characteristics, actuators, valves, accumulators, symbols, circuitry, filters, servicing safety, and preventive maintenance and the application of these concepts to perform work. Upon completion, students should be able to service and perform preventive maintenance functions on hydraulic and pneumatic systems. This is a CORE course. PREREQUISITE: As required by program.

INT126 – Preventive Maintenance - (3 cr. hrs.)
This course focuses on the concepts and applications of preventive maintenance. Topics include the introduction of alignment equipment, job safety, tool safety, preventive maintenance concepts, procedures, tasks, and predictive maintenance concepts. Upon course completion, students will demonstrate the ability to apply proper preventive maintenance and explain predictive maintenance concepts. PREREQUISITE: As required by program.

INT158 – Industrial Wiring I - (3 cr. hrs.)
This course focuses on principles and applications of commercial and industrial wiring. Topics include, electrical safety practices, an overview of National Electric Code requirements as applied to commercial and industrial wiring, conduit bending, circuit design, pulling cables, transformers, switch gear, and generation principles. PREREQUISITE: As required by program.

INT206 – Industrial Motors I - (3 cr. hrs.)
This course focuses on basic information regarding industrial electrical motors. Upon completion students will be able to troubleshoot, remove, replace, and perform routine maintenance on various types of motors. PREREQUISITE: As required by program.

INT253 – Industrial Robotics - (3 cr. hrs.)
This course provides instruction in concepts and theories for the operation of robotic servo motors and power systems used with industrial robotic equipment. Emphasis is on the application of the computer to control power systems to perform work. Student competencies include understanding of the functions of hydraulic, pneumatic, and electrical power system components, ability to read and interpret circuitry for proper troubleshooting and ability to perform preventative maintenance. PREREQUISITE: As required by program.

INT254 – Robot Maintenance and Troubleshooting - (3 cr. hrs.)
This course introduces the principle concepts of the troubleshooting and maintenance of robots. Topics include the recognition and description of major robot components. Students will learn to diagnose robot mechanical problems to the component level, replace mechanical components and perform adjustments, troubleshooting class 1, 2, and 3 faults, to manipulate I/O for the robot, and periodic and preventive maintenance. Students will learn how to safely power up robots for complete shutdown and how to manipulate robots using the teach pendant. Upon completion students will be able to describe the various robot classifications, characteristics, explain system operations of simple robots, and maintain robotic systems. PREREQUISITE: As required by program.

INT284 – Advanced Programmable Logic Controllers - (3 cr. hrs.)
This course includes the advanced principals of PLC's including hardware, programming, and troubleshooting. Emphasis is placed on developing advanced working programs, and troubleshooting hardware and software communication problems. Upon completion, students should be able to demonstrate their ability in developing programs and troubleshooting the system. PREREQUISITE: As required by program.

INT288 – Applied Principles of Programmable Controllers - (3 cr. hrs.)
This course provides a comprehensive study in the theory and application of specific models of programmable logic controllers. Topics include hardware configuration, memory and addressing detail function of software, instruction types, system troubleshooting, and simple programming techniques. PREREQUISITE: As required by program.

MTT139 – Basic Computer Numerical Control - (3 cr. hrs.)
This course introduces the concepts and capabilities of computer numeric control (CNC) machine tools. Topics include setup, operation, and basic applications. Upon completion, students should be able to develop a basic CNC program to safely operate a lathe and milling machine. This course is aligned with NIMS certification standards. PREREQUISITE: As required by program.

MTT147 – Introduction to Machine Shop I - (3 cr. hrs.)
This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, saws, milling machines, bench grinders, and layout instruments. Upon completion, students will be able to perform the basic operations of measuring, layout, drilling, sawing, turning, and milling. This is a CORE course. MTT 100 is a suitable substitute for MTT 147/148. PREREQUISITE: PREREQUISITE: As required by program.

WDT157 – Consumable Welding Processes - (3 cr. hrs.)
This course provides instruction and demonstration with the consumable welding processes to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe

operating practices, equipment identification, equipment set-up, correct selection of electrode, current/polarity, shielding gas and base metals. PREQUISITE: As required by program.

WKO110 – NCCER Core – (3 cr. hrs.)
This course is designed to provide students with knowledge and skills related to multi-craft technicians in a variety of fields. Information in this course is based on the National Center for Construction Education and Research (NCCER) core curriculum and prepares students to test for the NCCER credential. PREREQUISITE: PREREQUISITE: As required by program.

Welding (WDT)

ADM101 – Precision Measurement – (3 cr. hrs.)
This course covers the use of precision measurement instruments utilized in inspection. In addition, basic print reading techniques reverse engineering, and related industry standards required in advanced manufacturing disciplines are covered. Upon completion, students should be able to demonstrate correct use of precision measuring instruments, interpret basic prints and apply basic reverse engineering techniques. PREREQUISITE: As required by program.
Note: This is a suitable substitute for MTT 127.

ADM102 – Computer Aided Design – (3 cr. hrs.)
This course is an introduction to basic Computer Aided Design functions and techniques using "hands-on" applications. Topics include terminology, hardware, basic computer aided design (CAD) and operating system functions, file manipulation, industry standards for CAD drawings, and basic CAD software applications in producing softcopy and hardcopy. At the completion of this course, students should be proficient in the production of two-dimensional drawings that meets technical standards including setting up print styles and exporting drawings to the appropriate format. PREREQUISITE: As required by program.
Note: This course is a suitable substitute for DDT 104.

ADM106 – Quality Control Concepts – (3 cr. hrs.)
This course provides an overview of the materials and processes and quality assurance topics used in commercial and specialized manufacturing products. Emphasis is placed on process evaluation techniques that can be extrapolated to other system areas such as new products and new technology. Emphasis is also placed on quality assurance including the history of the quality movement, group problem solving, and statistical methods such as statistical process control (SPC), process capability studies, and the concepts associated with lean manufacturing. PREREQUISITE: As required by program.

ADM110 – Blueprint Reading – (3 cr. hrs.)
This course is designed to provide students with a comprehensive understanding of blueprint reading. Topics include identifying types of lines and symbols used in mechanical drawings; recognition and interpretation of various types of views, tolerance, and dimensions. PREREQUISITE: As required by program.

ADM111 – Manufacturing Safety Practices - (3 cr. hrs.)
This course is an introduction to general issues, concepts, procedures, hazards, and safety standards found in an industrial environment. This safety course is to make technicians aware of safety issues associated with their changing work environment and attempt to eliminate industrial accidents. This course will offer credentialing for NCCER Core and OSHA 10 hour. PREREQUISITE: As required by program.

ADM283 – CO-OP - (3 cr. hrs.)
These courses constitute a series wherein the student works on a part-time basis in a job directly related to advanced manufacturing. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting. PREREQUISITE: As required by program.

WDT108 – SMAW Fillet/OFC - (3 cr. hrs.)
This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting. PREREQUISITE: Approval of instructor.

WDT109 – SMAW Fillet/PAC/CAC - (3 cr. hrs.)
This course provides the student with instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW process. This course also covers the rules of basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of carbon arc cutting and plasma arc cutting. PREREQUISITE: Approval of Instructor.

WDT110 – Industrial Blueprint Reading - (3 cr. hrs.)
This course provides students with the understanding and fundamentals of industrial blueprint reading. Emphasis is placed on reading and interpreting lines, views, dimensions, weld joint configurations and weld symbols. Upon completion students should be able to interpret welding symbols and blueprints as they apply to welding and fabrication. PREREQUISITE: As required by program.

WDT115 – GTAW Carbon Pipe - (3 cr. hrs.)
This course is designed to provide the student with the practices and procedures of welding carbon pipe using the gas tungsten arc weld (GTAW) process. Emphasis is placed on pipe positions, filler metal selection, purging gasses, joint geometry joint preparation and fit-up. Upon completion, students should be able to identify pipe positions, filler metals, purging gas, proper joint geometry, joint preparation and fit-up to the applicable code. PREREQUISITE: As required by program.

WDT119 – Gas Metal Arc Flux Cored Arc Welding - (3 cr. hrs.)
This course introduces the student to the gas metal arc and flux-cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, various welding techniques and base and filler metal identification. PREREQUISITE: As required by program.

WDT 120 – SMAW (Shielded Metal Arc Welding) Groove - (3 cr. hrs.)
This course provides the student with instruction on joint design, joint preparation, and fit-up of groove welds in accordance with applicable welding codes. Emphasis is placed on safe operation, joint design, joint preparation, and fit-up. Upon completion, students should be able to identify the proper joint design, joint preparation and fit-up of groove welds in accordance with applicable welding codes. PREREQUISITE: As required by program.

WDT124 - Gas Metal Arc/Flux Cored Arc Welding Lab – (3cr. hrs.)
This course provides instruction and demonstration using the various transfer methods and techniques to gas metal arc and flux cored arc welds. Topics included are safety, equipment set-up, joint design and preparation, and gases. PREREQUISITE: As required by program.

WDT125 – Shielded Metal ARC Welding Groove Lab - (3 cr. hrs.)
This course provides instruction and demonstrations in the shielded metal arc welding process on carbon steel plate with various size F3 and F4 group electrodes in all positions. Emphasis is placed on welding groove joints and using various F3 and F4 group electrodes in all positions. Upon completion, the student should be able to make visually acceptable groove weld joints in accordance with applicable welding codes. PREREQUISITE: As required by program.

WDT155 – GTAW Carbon Pipe Lab - (3 cr. hrs.)
This course is designed to provide the student with the skills in welding carbon steel pipe with gas tungsten arc welding techniques in various pipe weld positions. Upon completion, students should be able to perform gas tungsten arc welding on carbon steel pipe with the prescribed filler metals in various positions in accordance with the applicable code. PREREQUISITE: WDT115 and/or as required by program.

WDT157 – Consumable Welding Processes - (3 cr. hrs.)
This course provides instruction and demonstration with the consumable welding processes to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of electrode, current/polarity, shielding gas and base metals. PREQUISITE: As required by program.

WDT158 – Consumable Welding Processes Lab - (3 cr. hrs.)
This course provides instruction and demonstration with the consumable welding processes to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of electrode, current/polarity, shielding gas and base metals. Upon completion, the student should be able to produce groove and fillet welds using consumable welding processes according to AWS Codes and standards. PREREQUISITE: WDT157

WDT166 - Flux Core Arc Welding - (3 cr. hrs.)
This course provides instruction and demonstration with the flux core arc welding process to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of filler metals, current/polarity, shielding gas and base metals. Upon completion, the student should be able to produce groove and fillet welds using the FCAW welding process, according to AWS Codes and Standards. PREQUISITE: As required by program.

WDT167 - Flux Core Arc Welding Lab - (3 cr. hrs.)
This course provides instruction and demonstration with the flux core arc welding process to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of filler metals, current/polarity, shielding gas and base metals. Upon completion, the student should be able to

produce groove and fillet welds using the FCAW welding process, according to AWS Codes and Standards. PREQUISITE: As required by program.

WDT217 – SMAW Carbon Pipe - (3 cr. hrs.)
This course introduces the student to the practices and procedures of welding carbon steel pipe using the shielded metal arc weld (SMAW) process. Emphasis is placed on pipe positions, electrode selection, joint geometry, joint preparation and fit-up. Upon completion, students should be able to identify pipe positions, electrodes, proper joint geometry, joint preparation, and fit-up in accordance with applicable codes. PREREQUISITE: As required by program.

WDT 218 – Certification - (3 cr. hrs.)
This course is designed to provide the student with the knowledge needed to perform welds using the prescribed welding process. Emphasis is placed on the welding test joints in accordance with the prescribed welding code. Upon completion, students should be able to pass an industry welding test in accordance with various applicable welding code requirements. PREREQUISITE: As required by program.

WDT219 – Welding Inspection and Testing - (3 cr. hrs.)
This course provides the student with inspection skills and knowledge necessary to evaluate welded joints and apply quality control measures as needed. Emphasis is placed on interpreting welding codes, welding procedures, and visual inspection methods. Upon completion, students should be able to visually identify visual acceptable weldments as prescribed by the code or welding specification report. PREREQUISITE: As required by program.

WDT228 – Gas Tungsten Arc Welding - (3 cr. hrs.)
This course provides student with knowledge needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes. PREREQUISITE: As required by program.

WDT257 – SMAW Carbon Pipe Lab - (3 cr. hrs.)
This course is designed to provide the student with the skills in welding carbon steel pipe with shielded metal arc welding techniques in various pipe welding positions. Upon completion, students should be able to perform shielded metal arc welding on carbon steel pipe with the prescribed electrodes in various positions in accordance with the applicable codes. PREREQUISITE: As required by program.

WDT258 – Certification Lab - (3 cr. hrs.)
This course is designed to provide the student with the skills needed to perform welds using the prescribed welding process. Emphasis is placed on the welding test joints in accordance with the prescribed welding code. Upon completion, students should be able to pass and industry standard welding test in accordance with various welding code requirements. PREREQUISITE: Approval of Instructor.

WDT268 – Gas Tungsten ARC Lab - (3 cr. hrs.)
This course provides student with skills needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes. PREREQUISITE: Approval of Instructor.

WDT269 – Boiler Tube Lab - (3 cr. hrs.)
This course is designed to provide the student with the skills in welding boiler tubes using the gas tungsten arc and shielded metal arc welding process using filler metals in the F6 and F4 groups to applicable code. Emphasis is placed on welding boiler tubes using the gas tungsten arc and shielded metal arc welding process in the 2G and 6G positions in accordance with the applicable code. Upon completion, students should be able to perform gas tungsten arc and shielded metal arc welding on boiler tubes with the prescribed filler metals in the 2G and 6G positions to the applicable code. PREREQUISITE: As required by program.

WDT280 – Special Topics - (3 cr. hrs.)
This course provides specialized instruction in various areas related to the welding industry. Emphasis is placed on meeting students' needs. PREREQUISITE: As required by program.

WDT281 – Special Topics in Welding Technology - (3 cr. hrs.)
This course provides specialized instruction in various areas related to the welding industry. Emphasis is placed on meeting students' needs. PREREQUISITE: As required by program.

WKO110 – NCCER Core – (3 cr. hrs.)
This course is designed to provide students with knowledge and skills related to multi-craft technicians in a variety of fields. Information in this course is based on the National Center for Construction Education and Research (NCCER) core curriculum and prepares students to test for the NCCER credential. PREREQUISITE: As required by program.

Automotive Services (ASE)

ADM101 – Precision Measurement – (3 cr. hrs.)
This course covers the use of precision measurement instruments utilized in inspection. In addition, basic print reading techniques reverse engineering, and related industry standards required in advanced manufacturing disciplines are covered. Upon completion, students should be able to demonstrate correct use of precision measuring instruments, interpret basic prints and apply basic reverse engineering techniques. PREREQUISITE: As required by program.
Note: This is a suitable substitute for MTT 127.

ASE101 – Fundamentals of Automotive Technology - (3 cr. hrs.)
This course provides basic instruction in Fundamentals of Automotive Technology. This is a CORE course. PREREQUISITE: As required by program.

ASE112 - Electrical Fundamentals - (3 cr. hrs.)
This course introduces the principles and laws of electricity. Emphasis is placed on wiring diagrams, test equipment, and identifying series, parallel and series-parallel circuits. Upon completion, students

should be able to calculate, build, and measure circuits. This is a CORE course. PREREQUISITE: As required by program.

ASE121 - Braking Systems – (3 cr. hrs.)
This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of brakes. ABR 223 Automotive Mechanical Components is a suitable substitute for this course. This is a CORE course. PREREQUISITE: As required by program.

ASE122 - Steering and Suspension - (3 cr. hrs.)
This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of steering and suspension. This is a CORE course. ABR 255 – Steering & Suspension is a suitable substitute for this course. PREREQUISITE: As required by program.

ASE124 - Automotive Engines - (3 cr. hrs.)
This course provides instruction on the operation, design, and superficial repair of automotive engines. Emphasis is placed on understanding the four-stroke cycle, intake and exhaust manifolds and related parts, engine mechanical timing components, engine cooling and lubrication system principles and repairs, and basic fuel and ignition operation. This is a CORE course. PREREQUISITE: As required by college. PREREQUISITE: As required by program.

ASE130 - Drive Train and Axles – (3cr. hrs.)
This course provides basic instruction in automotive drive trains and axles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and drivability. ABR 223 Automotive Mechanical Components is a suitable substitute for this course. This is a CORE course. PREREQUISITE: As required by program.

ASE133 - Motor Vehicle Air Conditioning – (3cr. hrs.)
This course provides basic instruction in theory, operation, and repair of automotive heating and air conditioning systems. Emphasis is placed on the understanding and repair of vehicle air conditioning and heating systems, including but not limited to air management, electrical and vacuum controls, refrigerant recovery, and component replacement. ABR 258 – Heating and AC in Collision Repair is a suitable substitute for this course. PREREQUISITE: As required by program.

ASE162 - Electrical and Electronic Systems – (3 cr. hrs.)
This is an intermediate course in automotive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of battery, starting, charging, and lighting systems, subsystems, and components. This is a CORE course. PREREQUISITE: As required by program.

ASE212 Advanced Electrical and Electronic Systems – (3cr. hrs.)
This course provides instruction in advanced automotive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of advanced electrical and electronic systems, subsystems, and components. PREREQUISITE: As required by program.

ASE 220 - Advanced Automotive Engines – (3 cr. hrs.)
This course provides in depth instruction concerning internal engine diagnosis, overhaul and repair, including but not necessarily limited to the replacement of timing chains, belts, and gears, as well as the replacement or reconditioning of valve train components as well as replacement of pistons, connecting

rods, piston rings, bearings, lubrication system components, gaskets, and oil seals. PREREQUISITE: As required by program.

ASE224 – Manual Transmission and Transaxle (3 cr. hrs.)
This course covers basic instruction in manual transmissions and transaxles. Emphasis is placed on the understanding and application of basic internal and external operation relating to proper operation and drivability. PREREQUISITE: As required by program.

ASE230 – Automatic Transmission and Transaxle - (3 cr. hrs.)
This course provides basic instruction in automatic transmissions and transaxles. Emphasis is placed on the comprehension of principles and power flow of automatic transmissions and repairing or replacing internal and external components. PREREQUISITE: As required by program.

ASE244 – Engine Performance and Diagnostics – (3 cr. hrs.)
This course provides advanced instruction in engine performance. Emphasis is placed on engine management and computer controls of ignition, fuel, and emissions systems relating to engine performance and drivability. PREREQUISITE: As required by program.

ASE246 – Automotive Emissions - (3 cr. hrs.)
This is an introductory course in automotive emission systems. Emphasis is placed on troubleshooting and repair of systems, subsystems, and components. PREREQUISITE: As required by program.

ASE263 – Hybrid & Electric Vehicles – (3 cr. hrs.)
This course is designed to measure a technician's knowledge of the skills needed to diagnose both high and low voltage electrical/electronic problems, as well as other supporting system problems on hybrid/electric vehicles. This course prepares students for the ASE Light Duty Hybrid/Electric Vehicle Specialist (LE) certification. PREREQUISITE: As required by program.

ASE281 – Special Topics – (3 cr. hrs.)
These courses are designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics application and with evaluation at the instructor's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any automotive or related area in automotive mechanics. Upon completion, the student should be able to work with minimum instruction and execute the necessary techniques to finish a live work project of their choice. PREREQUISITE: As required by program.

ASE290 – CO-OP - (3 cr. hrs.)
These courses constitute a series wherein the student works on a part-time basis in a job directly related to automotive technology. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting. PREREQUISITE: As required by program.

WDT119 – Gas Metal Arc Flux Cored Arc Welding - (3 cr. hrs.)
This course introduces the student to the gas metal arc and flux-cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, various welding techniques and base and filler metal identification. PREREQUISITE: As required by program.

WDT124 - Gas Metal Arc/Flux Cored Arc Welding Lab – (3cr. hrs.)
This course provides instruction and demonstration using the various transfer methods and techniques to gas metal arc and flux cored arc welds. Topics included are safety, equipment set-up, joint design and preparation, and gases. PREREQUISITE: As required by program.

Heating and Air Conditioning (ACR)

ACR111 – Principles of Refrigeration - (3 cr. hrs.)
This course emphasizes the fundamental principles for air conditioning and refrigeration. Instruction is provided in the theory and principles of refrigeration and heat transfer, HVAC/R system components, common, and specialty tools for HVAC/R, and application of the concepts of basic compression refrigeration. Upon completion, students should identify system components and understand their functions, identify and use common and specialty HVAC/R tools, and maintain components of a basic compression refrigeration system. PREREQUISITE: As required by program.

ACR112 – HVACR Service Procedures - (3 cr. hrs.)
This course covers system performance checks and refrigerant cycle diagnosis. Emphasis is placed on the use of refrigerant recovery/recycle units, industry codes, refrigerant coils and correct methods of charging and recovering refrigerants. Upon completion, students should be able to properly recover/recycle refrigerants and demonstrate safe, correct service procedures which comply with the no-venting laws. PREREQUISITE: As required by program.

ACR113 – Refrigeration Piping Practices - (3 cr. hrs.)
The course introduces students to the proper installation procedures of refrigerant piping and tubing for the heating, ventilation, air conditioning and refrigeration industry. This course includes various methods of working with and joining tubing. Upon completion, students should comprehend related terminology, and be able to fabricate pipe, tubing, and pipe fittings. PREREQUISITE: As required by program.

ACR119 – Fundamentals of Gas Heating Systems - (3 cr. hrs.)
This course provides instruction on general service and installation for common gas furnace system components. Upon completion, students will be able to install and service gas furnaces in a wide range of applications. PREREQUISITE: As required by program.

ACR120 – Fundamentals of Electrical Heating Systems - (3 cr. hrs.)
This course covers the fundamentals of electric furnace systems. Emphasis is placed on components, general service procedures, and basic installation. Upon completion, students should be able to install and service electric furnaces, heat pumps, and solar and hydronics systems. PREREQUISITE: As required by program.

ACR121 – Principles of Electricity for HVACR - (3 cr. hrs.)
This course is designed to provide the student with the basic knowledge of electrical theory and circuitry as it pertains to air conditioning and refrigeration. This course emphasizes safety, definitions, symbols, laws, circuits, and electrical test instruments. Upon completion students should understand and be able to apply the basic principles of HVACR circuits and circuit components. PREREQUISITE: As required by program.

ACR122 – HVACR Electrical Circuits - (3 cr. hrs.)
This course introduces the student to electrical circuits and diagrams. Electrical symbols and basic wiring diagrams are constructed in this course. Upon completion, student should understand standard wiring diagrams and symbols and be able to construct various types of electrical circuits. PREREQUISITE: As required by program.

ACR123 – HVACR Electrical Components - (3 cr. hrs.)
This course introduces students to electrical components and controls. Emphasis is placed of the operations on motors, relays, contactors, starters, and other HVAC electrical components. Upon completion, students should be able to install electrical components and determine their proper operation. PREREQUISITE: As required by program.

ACR125 – Fundamentals of Gas and Electrical Heating Systems - (6 cr. hrs.)
This course provides instruction on general service and installation for common gas and electrical heating systems. Emphasis is placed on components, general service procedures, and basic installation. Upon completion, students will be able to install and service gas and electrical heating systems in a wide range of applications. **NOTE:** This course is a suitable substitution for ACR 119 and 120 if those both courses are taken. PREREQUISITE: As required by program.

ACR126 – Commercial Heating Systems - (3 cr. hrs.)
This course covers the theory and application of larger heating systems. Emphasis is placed on larger heating systems associated with commercial applications such as gas heaters, boilers, unit heaters, and duct heaters. Upon completion, student should be able to troubleshoot and perform general maintenance on commercial heating systems. PREREQUISITE: As required by program.

ACR132 – Residential Air Conditioning - (3 cr. hrs.)
This course introduces students to residential air conditioning systems. Emphasis is placed on the operation, service, and repair of residential air conditioning systems. Upon completion, students will be able to service and repair residential air conditioning systems. PREREQUISITE: As required by program.

ACR148 – Heat Pump Systems I - (3 cr. hrs.)
Instruction received in this course centers around the basic theory and application of heat pump systems and components. Upon completion students will be able to install and service heat pumps in a wide variety of applications. PREREQUISITE: As required by program.

ACR149 – Heat Pump Systems II - (3 cr. hrs.)
This is a continuation course of the basic theory and application of heat pump systems. Topics include the electrical components of heat pumps and their function. Upon completion student should be able to install and service heat pumps. PREREQUISITE: As required by program.

ACR152 – Heat Pump Systems – (6 cr. hrs.)
This course provides instruction on the operation and servicing of heat pump systems. Emphasis is placed on theory and application of refrigerants for heat pump systems and on basic service of components. Students should possess a strong foundation of electrical principles and theory. Upon completion students will be able to install and service heat pumps. NOTE: Information in this course is identical to ACR 148 and 149 and can be an alternative to those courses. PREREQUISITE: As required by program.

ACR181 – Special Topics in Air Conditioning and Refrigeration I – (3 cr. hrs.)
This course provides specialized instruction in various areas related to the air conditioning and refrigeration industry. PREREQUISITE: As required by program.

ACR182 - Special Topics in Air Conditioning and Refrigeration II – (3 cr. hrs.)
This course provides students with opportunities to experience hands-on application of specialized instruction in various areas related to the air conditioning and refrigeration industry. PREREQUISITE: As required by program.

ACR192 – HVAC Apprenticeship/Internship - (3 cr. hrs.)
This course is designed to provide basic hands-on experiences in the work place. The student is provided with a training plan developed by the employer and instructor working together to guide the learning experience. Upon course completion, students should be able to work independently and apply related skills and knowledge. This course involves a minimum of 15 work hours per week. PREREQUISITE: As required by program.

ACR195 – CO-OP – (3 cr. hrs.)
These courses constitute a series wherein the student works on a part-time basis in a job directly related to Air Conditioning/Refrigeration. In these courses the employer evaluates the student's productivity and the student submits a descriptive report of his work experiences. Upon completion, the student will demonstrate skills learned in an employment setting. PREREQUISITE: As required by program.

ACR209 – Commercial Air Conditioning Systems - (3 cr. hrs.)
This course focuses on servicing and maintaining commercial and residential HVAC/R systems. Topics include system component installation and removal and service techniques. Upon completion, the student should be able to troubleshoot and perform general maintenance on commercial and residential HVAC/R systems. PREREQUISITE: As required by program.

ACR210 – Troubleshooting HVACR Systems - (3 cr. hrs.)
This course provides instruction in the use of various meters and gauges used in the HVACR industry. Emphasis is placed on general service procedures, system diagnosis, and corrective measure, methods of leak detection, and system evacuation, charging and performance checks. Upon completion students should be able to perform basic troubleshooting of HVAC/R. PREREQUISITE: As required by program.

Applied Services Technology

Cosmetology Instructor Training (CIT)

CIT211 – Teaching and Curriculum Development - (3 cr. hrs.)
This course focuses on principles of teaching, teaching maturity, professional conduct, and the development of cosmetology curriculum. Emphasis is placed on teacher roles, teaching styles, teacher challenges, aspects of curriculum development, and designing individual courses. Upon completion, the student should be able to describe the role of teacher, identify means of motivating students, develop a course outline, and develop lesson plans. PREREQUISITE: Licensed cosmetologist (1 years' experience). COREQUISITE: CIT212

CIT212 – Teacher Mentorship - (3 cr. hrs.)
This course is designed to provide the practice through working with a cosmetology instructor in a mentoring relationship. Emphasis is placed on communication, student assessment, and assisting

students in the lab. Upon completion, the student should be able to communicate with students, develop a course of study, and apply appropriate teaching methods. PREREQUISITE: Licensed cosmetologist (1 years' experience). COREQUISITE: CIT211

CIT213 – Cosmetology Instructor Co-op - (3 cr. hrs.)
The course provides students with additional opportunities to observe instructors and develop teaching materials and skills. PREREQUISITE: Licensed managing cosmetologist (1 years' experience). COREQUISITE: CIT214

CIT214 – Lesson Plan Methods and Development (3 cr. hrs.)
During this course students have the opportunity to further apply knowledge of lesson planning and lesson delivery by using lesson plans they have developed from previous courses or this course. Emphasis is placed on the use of lesson plans in various classroom and laboratory settings. Upon completion, students will be able to teach a variety of cosmetology classes using various techniques. This course serves as a suitable substitute for CIT 221. If used as a suitable substitute, this course becomes a core course. PREREQUISITE: Licensed managing cosmetologist (1 years' experience). COREQUISITE: CIT213

CIT222 – Audio Visual Materials and Methods - (3 cr. hrs.)
This course focuses on visual and audio aids and materials. Emphasis is placed on the use and characteristics of instructional aids. Upon completion, students should be able to prepare teaching aids and determine their most effective use. PREREQUISITE: Licensed managing cosmetologist (1 years' experience). COREQUISITE: CIT223

CIT223 – Audio Visual Materials and Methods Applications (3 cr. hrs.)
This course is designed to provide practice in preparing and using visual and audio aids and materials. Emphasis is placed on the preparation and use of different categories of instructional aids. Upon completion, the student should be able to prepare and effectively present different types of aids for use with a four-step lesson plan. PREREQUISITE: Licensed managing cosmetologist (1 years' experience). COREQUISITE: CIT222

Salon Management (SAL) – Barbering, Cosmetology, Nail Care, Esthetics. Natural Hair

ACT201 – Entrepreneurism - (3 cr. hrs.)
This course covers the important issues and critical steps involved in starting a new business from scratch. Topics covered include developing a business plan, creating a successful marketing strategy, setting up the legal basis for business, raising start-up funds, attracting and managing human resources, managing costs, and developing a custom base. PREREQUISITE: None.

BAR108– Introduction to Barbering - (3 cr. hrs.)
This course provides an orientation to professional barber styling. Topics include learning skills, history of barbering, professional image, microbiology, safety, infection control, implements and tools, razor shaving properties and disorders of hair and scalp, and the treatment of hair. This is a CORE course. PREREQUISITE: As required by program.

BAR111 – Introduction to Barbering Lab - (3 cr. hrs.)
This course provides practical application of barber-styling fundamentals. Emphasis is placed on safety, infection control, the use and care of implements, treatment of hair, and razor shaving. Upon

completion, the student will demonstrate proper infection control, hair care, and use of implements. This is a CORE course. PREREQUISITE: As required by program.

BAR112 – Science of Barbering - (3 cr. hrs.)
This course introduces the student to the basic science of barber-styling. Topics include anatomy/physiology, disorders and treatments of the skin, scalp, and hair, and theory of facial and scalp massage. Upon completion, the student should be familiar with the anatomical structures, as well as disorders and treatments of the skin, scalp, and hair. This is a CORE course. PREREQUISITE: As required by program.

BAR113 – Fundamentals of Barbering Applications - (3 cr. hrs.)
This course provides practical application of barber fundamentals learned in earlier courses. Emphasis is placed on safety, facial massage, treatment of hair and scalp proper use and care of implements, shampooing and haircutting, and razor shaving. Upon completion, the student should be able to perform fundamental barbering techniques with limited supervision. This is a CORE course. PREREQUISITE: As required by program.

BAR140 – Practicum I - (2 cr. hrs.)
This course provides the student an opportunity to combine knowledge and skill covering all aspects of barber-styling in a professional setting or school lab with minimal supervision. Emphasis is placed on utilization of the knowledge and technical skills covered in the barbering-styling curriculum. Upon completion the student should be able to function in a professional setting with very little assistance. PREREQUISITE: As required by program.

BAR141 – Practicum II - (2 cr. hrs.)
This course provides the student an additional opportunity to combine knowledge and skill covering all aspects of barber-styling in a professional setting or school lab with minimal supervision. Emphasis is placed on utilization of the knowledge and technical skills covered in the barbering-styling curriculum. Upon completion the student should function in a professional setting as a productive employee or manager. PREREQUISITE: As required by program.

COS111 – Introduction to Cosmetology - (3 cr. hrs.)
This course is designed to provide students with an overview of the history and development of cosmetology and standards of professional behavior. Students receive basic information regarding principles and practices of infection control, diseases, and disorders. Additionally, students receive introductory information regarding hair design. The information presented in this course is enhanced by hands-on application performed in a controlled lab environment. Upon completion, students should be able to apply safety rules and regulations and write procedures for skills identified in this course. This is a CORE course. COREQUISITE: COS112.

COS112 – Introduction to Cosmetology Lab - (3 cr. hrs.)
In this course, students are provided the practical experience for sanitation, shampooing, hair shaping, and hairstyling. Emphasis is placed on disinfection, shampooing, hair shaping, and hairstyling for various types of hair for men and women. This course offers opportunities for students to put into practice concepts learned in the theory component from COS111. This is a CORE course. COREQUISITE: COS111.

COS113 – Theory of Chemical Services - (3 cr. hrs.)
During this course students learn concepts of theory of chemical services related to the chemical hair texturing. Specific topics include basics of chemistry and electricity, properties of the hair and scalp, and chemical texture services. Safety considerations are emphasized throughout this course. This course is foundational for other courses providing more detailed instruction on these topics. This is a CORE course. COREQUISITE: COS114.

COS114 – Chemical Services Lab - (3 cr. hrs.)
During this course students perform various chemical texturing activities. Emphasis is placed on cosmetologist and client safety, chemical use and handling, hair and scalp analysis, and client consulting. This is a CORE course. COREQUISITE: COS113.

COS120- Hair Coloring Theory and Lab Combined – (3cr. hrs.)
In this course, students learn and apply the techniques of hair coloring and hair lightening. Emphasis is placed on all color applications and lightening, laws, levels, classifications of color, problem solving, consultation, hair analysis, and patch test. Upon completion, the student will should be able to identify all classifications of hair coloring, the effects of color on the hair, perform procedures for hair coloring and hair lightening. Note: This course is a substitution for the CORE courses COS115 and 116. PREREQUISITE: As required by program.

COS121 - Basic Spa Techniques Theory and Lab Combined - (3cr. hrs.)
This course is the study of cosmetic products, massage, skin care, and hair removal, as well as identifying the structure and function of various systems of the body. It also provides practical applications related to the care of the skin and related structure. Topics include massage techniques, skin analysis, skin structure, disease and disorder, light therapy, facials, facial cosmetics, anatomy, hair removal, nail care, product application and facial make-up. Upon completion, the student should be able to prepare clients, assemble sanitized materials, follow procedures for product application, recognize skin disorders, demonstrate facial massage movement, cosmetic application, and hair removal using safety and sanitary precautions, and nail care. The student will also be able to state procedures for analysis, light therapy, facials, hair removal, and identify the structures, functions, disorders of the skin, and nail care. Note: This course is a substitution for the CORE courses COS117 and 118. PREREQUISITIE: As required by program.

COS123 – Cosmetology Salon Practices - (3 cr. hrs.)
This course is designed to allow students to practice all phases of cosmetology in a salon setting. Emphasis is placed on professionalism, receptionist duties, hair styling, hair shaping, chemical, and nail and skin services for clients. Upon completion, the student should be able to demonstrate professionalism and the procedures of cosmetology in a salon setting. PREREQUISITE: As required by college.

COS134 -ADVANCED ESTHETICS - (3 cr. hrs.)
This course includes an advanced study of anatomy and physiology relating to skin care, cosmetic chemistry, histology of the skin, and massage and facial treatments. Upon completion, the student should be able to discuss the functions of the skin, effects of chemicals on skin, different types of massage and benefits, and key elements of the basic facial treatment. PREREQUISITE: As required by program.

COS143 – Specialty Hair Preparation Techniques - (3 cr. hrs.)
This course focuses on the theory and practice of hair designing. Topics include creating styles using basic and advanced techniques of back combing, up sweeps and braiding. Upon completion, the student should be able to demonstrate the techniques and procedures for hair designing. PREREQUISITE: As required by program.

COS144 – Hair Shaping and Design - (3 cr. hrs.)
In this course, students learn the art and techniques of hair shaping. Topics include hair sectioning, correct use of hair shaping implements, and elevations used to create design lines. Upon completion, the student should be able to demonstrate the techniques and procedures for creating hair designs. PREREQUISITE: As required by program.

COS145 – Hair Shaping Lab - (3 cr. hrs.)
This covers the study of the art and techniques of hair shaping. Topics include hair sectioning, correct use of hair shaping implements, and elevations used to create design lines. Upon completion, the student should be able to demonstrate the techniques and procedures for creating hair designs using safety and sanitary precautions. PREREQUISITE: As required by program.

COS146 – Hair Additions - (3 cr. hrs.)
This course focuses on the practice of adding artificial hair. Topics include hair extensions, weaving, and braiding. Upon completion, the student should be able to demonstrate the techniques and procedures for attaching human and synthetic hair. PREREQUISITE: As required by program.

COS148 – Nail Care Theory – (3 cr. hrs.)
This course focuses on all aspects of nail care. Topics include salon conduct, professional ethics, sanitation, nail structure, manicuring, pedicuring, nail disorders, and anatomy and physiology of the arm and hand. Upon completion, the student should be able to demonstrate professional conduct, recognize nail disorders and diseases, and identify the procedures for sanitation and nail care services. PREREQUISITE: As required by program.

COS149 – Nail Art Theory – (3 cr. hrs.)
This course focuses on nail enhancement products and techniques. Topics include acrylic, gel, fiberglass nails, and nail art. Upon completion, the student should be able to identify the different types of sculptured nails and recognize the different techniques of nail art. PREREQUISITE: As required by program.

COS152 – Nail Care Applications – (3 cr. hrs.)
This course provides practice in all aspects of nail care. Topics include salon conduct, professional ethics, bacteriology, sanitation and safety, manicuring and pedicuring. Upon completion, the student should be able to perform nail care procedures. PREREQUISITE: As required by program.

COS154 – Nail Art Applications – (3 cr. hrs.)
This course provides practice in advanced nail techniques. Topics include acrylic, gel, fiberglass nails, and nail art. Upon completion, the student should be able to perform the procedures for nail sculpturing and nail art. PREREQUISITE: As required by program.

COS163 – Facial Treatments - (3 cr. hrs.)
This course includes all phases of facial treatments in the study of skin care. Topics include treatments for oily, dry, and special skin applications. Upon completion, students will able to apply facial treatments according to skin type. PREREQUISITE: As required by program.

COS164 – Facial Machine - (3 cr. hrs.)
This is a course designed to provide practical experience using the vapor and facial machine with hydraulic chair. Topics include the uses of electricity and safety practices, machine and apparants, use of the magnifying lamp, and light therapy. Upon completion, the student will be able to demonstrate an understanding of electrical safety and skills in the use of facial machines. PREREQUISITE: As required by program.

COS165 – Related Subjects – Estheticians - (3 cr. hrs.)
This course includes subjects related to the methods for removing unwanted hair. This course includes such topics as electrolysis information and definitions, safety methods of permanent hair removal, the practice of removal of superfluous hair, and the use of depilatories. Upon completion of this course, students will be able to apply depilatories and practice all safety precautions. PREREQUISITE: As required by program.

COS167 – State Board Review - (3 cr. hrs.)
Students are provided a complete review of all procedures and practical skills pertaining to their training in the program. Upon completion, the student should be able to demonstrate the practical skills necessary to complete successfully the required State Board of Cosmetology examination and entry-level employment. PREREQUISITE: As required by program.

COS168 – Bacteriology and Sanitation - (3 cr. hrs.)
In this skin care course, emphasis is placed on the decontamination, infection control and safety practiced in the esthetics facility. Topics covered include demonstration of sanitation, sterilization methods and bacterial prevention. Upon completion, the student will be able to properly sanitize facial implements and identify non-reusable items. PREREQUISITE: As required by program.

COS169 – Skin Functions - (3 cr. hrs.)
This course introduces skin functions and disorders. Topics include practical application for skin disorder treatments, dermabrasion, and skin refining. Upon completion of this course students will be able to demonstrate procedures for acne, facials and masks for deeper layers and wrinkles. PREREQUISITE: As required by program.

SAL133 - Salon Management Technology - (3 cr. hrs.)
This course is designed to develop entry-level management skills for the beauty industry. Topics include job-seeking, leader and entrepreneurship development, business principles, business laws, insurance, marketing, and technology issues in the workplace. Upon completion, the student should be able to list job-seeking and management skills and the technology that is available for use in the salon. PREREQUISITE: As required by program.

Business Administration (BUS) – Accounting, Business Management and General Business

ACT114 – Introduction to Accounting Database Resources - (3 cr. Hrs.)
This course introduces the student to Database resources available for use with the accounting programs. Emphasis is placed on Database and Financial Accounting software packages. Upon

completion of this course, the student will be able to use the computerized Database software. PREREQUISITE: None.

ACT115 – Introduction to Accounting Computer Resources - (3 cr. hrs.)
This course introduces the student to the computer resources available for use with the accounting program. Emphasis is placed on accounting spreadsheets and financial accounting software packages. Upon completion of this course, the student will be able to use the computer resources in the accounting program. NOTE: Students are expected to have a basic knowledge and skills of computers and common software. PREREQUISITE: BUS241.

ACT195 – Accounting Co-op - (3 cr. hrs.)
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. PREREQUISITE: Instructor permission.

ACT201 – Entrepreneurism - (3 cr. hrs.)
This course covers the important issues and critical steps involved in starting a new business from scratch. Topics covered include developing a business plan, creating a successful marketing strategy, setting up the legal basis for business, raising start-up funds, attracting and managing human resources, managing costs, and developing a custom base. PREREQUISITE: None.

ACT247 – Advanced Accounting Applications on the Microcomputer - (3 cr. hrs.)
In this course, students use the microcomputer in managerial accounting. Emphasis is on a variety of software programs for managerial accounting applications. Upon completion of this course, the student will be able to use various managerial accounting software programs. PREREQUISITE: ACT246.

ACT249 – Payroll Accounting - (3 cr. hrs.)
This course focuses on federal, state and local laws affecting payrolls. Emphasis is on payroll accounting procedures and practices, and on payroll tax reports. Upon completion of this course, the student will be able to apply knowledge of federal, state and local laws affecting payrolls. This is a CORE course. PREREQUISITE: BUS241.

ACT253 – Individual Income Tax - (3 cr. hrs.)
This course focuses on the fundamentals of the federal income tax laws with primary emphasis on those affecting the individual. Emphasis is on gross income determination, adjustments to income, business expenses, itemized deductions, exemptions, capital gains/losses, depreciation, and tax credits. Upon completion of this course, the student will be able to apply the fundamentals of the federal income tax laws affecting the individual. PREREQUISITE: None.

BUS100 – Introduction to Business - (3 cr. hrs.)
This is a survey course designed to acquaint the student with American business as a dynamic process in a global setting. Topics include the private enterprise system, forms of business ownership, marketing, factors of production, personnel, labor, finance, and taxation. PREREQUISITE: As required by program.

BUS146 – Personal Finance - (3 cr. hrs.)
This course is a survey of topics to the consumer. Topics include budgeting, financial institutions, basic income tax, credit, consumer protection, insurance, house purchase, retirement planning, estate planning, investing and consumer purchases. PREREQUISITE: None.

BUS147 – Introduction to Finance - (3 cr. hrs.)
This course is a survey of monetary and credit systems. Topics include the role of the Federal Reserve System, source of capital, including forms of long-term corporate financing, and consumer credit in the financial structure of our economy. PREREQUISITE: BUS241.

BUS186 – Elements of Supervision - (3 cr. hrs.)
This course is an introduction to the fundamentals of supervision. Topics include the functions of management, responsibilities of the supervisor, management-employee relations, organizational structure, project management, and employee training and rating. PREREQUISITE: None.

BUS215 – Business Communication - (3 cr. hrs.)
This course covers written, oral and nonverbal communications. Topics include the application of communication principles to the production of clear, correct, and logically organized faxes, e-mail, memos, letters, resumes, reports, and other business communications. PREREQUISITE: None.

BUS241 – Principles of Accounting I - (3 cr. hrs.)
This course is designed to provide a basic theory of accounting principles and practices used by service and merchandising enterprises. Emphasis is placed on financial accounting, including the accounting cycle, and financial statement preparation analysis. PREREQUISITE: None.

BUS242 – Principles of Account II - (3 cr. hrs.)
This course is a continuation of BUS 241. In addition to a study of financial accounting, this course also places emphasis upon managerial accounting, with coverage of corporations, statement analysis introductory cost accounting, and use of information for planning, control, and decision making. PREQUISITE: BUS241.

BUS245 - Accounting with QuickBooks – (3cr. hrs.)
This course will introduce students to computerized accounting systems using QuickBooks. Students will set up and perform routine tasks such as recording business transactions, maintaining customer and vendor files, vouchering, controlling inventory, processing sales, maintaining fixed asset and depreciation schedules, and preparing payroll. Additional procedures covered include setting up a chart of accounts, summarizing data, generating financial reports and banking transactions. PREREQUISITE: As required by college. PREREQUISITE: As required by program.

BUS248 – Managerial Accounting - (3 cr. hrs.)
This course is designed to familiarize the student with management concepts and techniques of industrial accounting procedures. Emphasis is placed on cost behavior, contribution approach to decision-making, budgeting, overhead analysis, cost-volume-profit analysis, and cost accounting systems. PREREQUISITE: BUS241.

BUS263 – Legal and Social Environment of Business (3 cr. hrs.)
This course provides an overview of the legal and social environment for business operations with emphasis on contemporary issues and their subsequent impact on business. Topics include the

Constitution, the Bill of Rights, the legislative process, civil and criminal law, administrative agencies, trade regulations, consumer protection, contracts, employment and personal property. PREQUISITE: None.

BUS271 – Business Statistics I - (3 cr. hrs.)
This is an introductory study of basic statistical concepts applied to economic and business problems. Topics include the collection, classification, and presentation of data, statistical description and analysis of data, measures of central tendency and dispersion, elementary probability, sampling, estimation and introduction to hypothesis testing. PREREQUISITE: Two years of high school Algebra, Intermediate Algebra or appropriate score on math Placement Test.

BUS272 – Business Statistics II - (3 cr. hrs.)
This course is a continuation of BUS272. Topics include sampling theory, statistical interference, regression and correlation, chi square, analysis of variance, time series index numbers and decision theory. PREREQUISITE: BUS271.

BUS275 – Principles of Management - (3 cr. hrs.)
This course provides a basic study of the principles of management. Topics include planning, organizing, staffing, directing and controlling with emphasis on practical business applications. PREQUISITE: None.

BUS276 – Human Resources Management - (3 cr. hrs.)
This course provides an overview of the responsibilities of the supervisor of human resources. Topics include the selection, placement, testing, orientation, training, rating, promotion, and transfer of employees. PREREQUISITE: None.

BUS279 – Small Business Management - (3 cr. hrs.)
This course provides an overview of the creation and operation of a small business. Topics include buying a franchise, starting a business, identifying capital resources, understanding markets, managing customer credit, managing accounting systems, budgeting systems, inventory systems, purchasing insurance, and the importance of appropriate legal counsel. PREREQUISITE: None.

BUS285 – Principles of Marketing - (3 cr. hrs.)
This course provides a general overview of the field of marketing. Topics include marketing strategies, channels of distribution, marketing research, and consumer behavior. PREREQUISITE: None.

CIS147 – Advanced Micro Applications - (3 cr. hrs.)
This course is a continuation of CIS 146 in which students utilize the advanced features of topics covered in CIS 146. Advanced functions and integration of word processing, spreadsheets, database, and presentation packages among other topics are generally incorporated into the course and are to be applied to situations found in society and business. Upon completion, the student should be able to apply the advanced features of selected software appropriately to typical problems found in society and business. This course will help prepare students for the MOS certification. PREREQUISITE: As required by program.

CIS185 – Computer Ethics – (3cr. hrs.)
This course will survey the various issues surrounding computer ethics. PREREQUISITE: As required by program.

CIS196 – Commercial Software Applications - (3 cr. hrs.)
This is a "hands-on" introduction to software packages, languages, and utility programs currently in use, with the course being able to repeat for credit for each different topic being covered. Emphasis is placed on the purpose capabilities and utilization of each package, language or program. Upon completion, students will be able to use the features selected for the application covered. PREREQUISITE: As required by program.

LGT108 – Introduction to Logistics – (3cr. hrs.)
This course introduces students to the basic concepts of logistics for a variety of applications. Students gain insights into how logistics play a vital role in all aspects of business and industry. Specific topics include basic concepts of logistics and health and safety concerns in warehouse and transportation environments. PREREQUISITE: As required by program.

LGT114 – Supply Chain Fundamentals/Management – (3 cr. hrs.)
This course introduces students to the basic concepts of the supply chain and supply chain management. Students gain insights into the various components of the supply chain, how the supply chain functions interrelate and how they are managed in the business and industry environment. Specific topics include basic concepts of “links and drivers” in the Supply Chain, such as inventory management, sourcing, requisitioning, ERP systems, Purchase Orders, EDI, contracting and distribution. PREREQUISITE: As required by program.

LGT115 – Purchasing in Logistics – (3 cr. hrs.)
This course provides students with an introduction to purchasing processes to include the impact of purchasing, compliance issues, and Incoterms. Emphasis is placed on the purchase of efficient and effective purchasing practice to ensure the best uses of resources. PREREQUISITE: As required by college. PREREQUISITE: As required by program.

LGT132 – Physical Distribution Systems – (3 cr. hrs.)
This course provides students with an overview of distribution systems common to logistics operations. Specific topics include just in time systems, warehousing, cross docking, and major methods of transportations. Upon completion of this course students will comprehend how various distribution systems impact logistics operations. PREREQUISITE: As required by program.

LGT271 – Supply Chain Analytics – (3 cr. hrs.)
This course provides an introduction to data analysis tools and techniques used by Logistics/Supply Chain Management personnel to effectively analyze large volumes of data. Topics include collection, classification, sortation and presentation of multiple levels/types of product data. PREREQUISITE: As required by program.

OAD101 - Beginning Keyboarding – (3 cr. hrs.)
This course is designed to enable the student to use the touch method of keyboarding through classroom instruction and outside lab. Emphasis is on speed and accuracy in keying alphabetic, symbol, and numeric information using a keyboard. Upon completion, the student should be able to demonstrate proper technique and an acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of basic business documents such as memoranda, letters, reports, etc. PREREQUISITE: As required by program.

Computer Information Systems (CIS)

CIS146 – Microcomputer Applications - (3 cr. hrs.)
This course is an introduction to the most common microcomputer software applications. These software packages should include typical features of applications, such as word processing, spreadsheets, database management, and presentation software. Upon completion, students will be able to utilize selected features of these packages. This course will help prepare students for the MOS and IC^{3}certification. PREREQUISITE: As required by program.

CIS147 – Advanced Micro Applications - (3 cr. hrs.)
This course is a continuation of CIS 146 in which students utilize the advanced features of topics covered in CIS 146. Advanced functions and integration of word processing, spreadsheets, database, and presentation packages among other topics are generally incorporated into the course and are to be applied to situations found in society and business. Upon completion, the student should be able to apply the advanced features of selected software appropriately to typical problems found in society and business. This course will help prepare students for the MOS certification. PREREQUISITE: As required by program.

CIS149 – Introduction to Computers - (3 cr. hrs.)
This course is an introduction to computers and their impact on society. The course covers the development of computers, their impact on society, as well as future implications of development of computer and related communication technologies. This course introduces programming and computer operating systems. Upon completion, students will have basic knowledge of computer technology and will be able to perform basic functions with a computer system. The course will help prepare students for the IC^3 certification. PREREQUISITE: As required by program.

CIS150 – Introduction to Computer Logic and Programming - (3 cr. hrs.)
This course includes logic, design and problem-solving techniques used by programmers and analysts in addressing and solving common programming and computing problems. The most commonly used techniques of flowcharts, structure charts, and pseudo code will be covered and students will be expected to apply the techniques to designated situations and problems. PREREQUISITE: As required by program.

CIS151 – Graphics for the World Wide Web - (3 cr. hrs.)
This course provides an overview to the theory, tools, and techniques necessary for creating high-quality graphics using various design software tools. At the completion of this course students will be able to apply various software packages to create graphics for Web applications in raster or vector format. PREREQUISITE: As required by program.

CIS157 - Introduction to App Development with Swift - (3 cr. hrs.)
This introductory one-semester course is designed to help students build a solid foundation in programming fundamentals using Swift as the language. Students get practical experience with the tools, techniques, and concepts needed to build a basic iOS system. PREREQUISITE: As required by program.

CIS171 –LINUX I - (3 cr. hrs.)
This course presents fundamental applications in Linux. Included in this course are skills development for OS installation and setup, recompile techniques, system configuration settings, file/folder structures and types, run levels, basic network applications, and scripting. Additionally, the course presents

security features from an administrative and user consideration. PREREQUISITE: As required by program.

CIS172 – Fundamentals LINUX II - (3 cr. hrs.)
This course is a continuation of CIS 17 and includes advance features of Linux. Included in this course are web applications, integrated network configurations, file transfer, server administration, system controls, IP tables/firewall to secure Linux systems, and strategic user-group applications specific to administrative network control. PREREQUISITE: CIS171.

CIS185 – Computer Ethics – (3cr. hrs.)
This course will survey the various issues surrounding computer ethics. PREREQUISITE: As required by program.

CIS189 – CO-OP for CISI – (3 cr. hrs.)
This course is part of a series wherein the student works in a degree/program related job. Emphasis is placed on student's work experience as it integrates academic knowledge with practical application through exposure to computer practices in informational technologies environment. The grade is based on the employer's evaluation of each student's productivity, content of a descriptive report submitted by the student, and student development and assessment of a learning contract. PREREQUISITE: As required by program.

CIS196 – Commercial Software Applications - (3 cr. hrs.)
This is a "hands-on" introduction to software packages, languages, and utility programs currently in use, with the course being able to repeat for credit for each different topic being covered. Emphasis is placed on the purpose capabilities and utilization of each package, language or program. Upon completion, students will be able to use the features selected for the application covered. PREREQUISITE: As required by program.

CIS197 – Advanced Commercial Software Applications - (3 cr. hrs.)
This course provides the student with hands-on experience in using the advanced features of software packages, languages, and utility programs currently in use. Each offering focuses on one software package with credit being received for each different package. Upon completion, students will be able to use the features selected for the application covered. PREREQUISITE: As required by program.

CIS199 – Network Communications - (3 cr. hrs.)
This course is designed to introduce students to the basic concepts of computer networks. Emphasis is placed on gaining an understanding of the terminology and technology involved in implementing networked systems. The course will cover the OSI and TCP/IP network models, communications protocols, transmission media, networking hardware and software, LANs (Local Area Networks) and WANs (Wide Area Networks), Client/Server technology, the Internet, Intranets and network troubleshooting. Upon completion of the course, students will be able to design and implement a computer network. Students will create network shares, user accounts, and install print devices while ensuring basic network security. They will receive hands-on experience building a mock network in the classroom. CIS 161 or CIS 272 may be used as a suitable substitute for this course. PREREQUISITE: As required by program.

CIS203 – Introduction to the Information Highway - (3 cr. hrs.)
This course introduces students to basic principles of the information highway. Students are exposed to different network information tools such as electronic mail, network news, browsers, commercial information services, appropriate editors, and Web authoring software. PREREQUISITE: As required by program.

CIS207 – Web Development - (3 cr. hrs.)
This course provides students with opportunities to learn Hypertext Markup Language, cascading style sheets, and Java Script. At the conclusion of this course, students will be able to use specified markup languages to develop basic Web pages. PREREQUISITE: As required by program.

CIS208 – Web Authoring Software - (3 cr. hrs.)
Students utilize various Web authoring tools to construct and edit Web sites for a variety of applications. Upon completion students will be able to use these tools to develop or enhance Web sites. PREREQUISITE: As required by program.

CIS209 – Advanced Web Development - (3 cr. hrs.)
This is an advanced Web design course emphasizing the use of scripting languages to develop interactive Web sites. Upon completion students will be able to create data driven Web sites. PREREQUISITE: As required by program.

CIS212 – Visual Basic Programming - (3 cr. hrs.)
This course emphasizes BASIC programming using a graphical user interface. The course will emphasize graphical user interfaces with additional topics on such topics as advanced file handling techniques, simulation, and other selected areas. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. PREREQUISITE: As required by program.

CIS213 – Advanced Visual Basic Programming - (3 cr. hrs.)
This course is a continuation of CIS 212, Visual Basic Programming. PREREQUISITE: As required by program.

CIS215 – C+ Programming - (3 cr. hrs.)
This course is an introduction to the C+ programming language. The goal of this course is to provide students with the knowledge and skills they need to develop C+ applications for the Microsoft .NET Platform. Topics include program structure, language syntax, and implementation details. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. PREREQUISITE: As required by program.

CIS220 - APP DEVELOPMENT WITH SWIFT - (3 cr. hrs.)
This is the first of two courses designed to teach specific skills related to app development using Swift language. PREREQUISITE: As required by program.

CIS222 – Database Management Systems- (3 cr. hrs.)
This course will discuss database system architectures, concentrating on Structured Query Language (SQL). It will teach students how to design, normalize and use databases with SQL, and to link those to the Web. PREREQUISITE: As required by program.

CIS227 - APP DEVELOPMENT WITH SWIFT II - (3 cr. hrs.)
This course focuses on building specific features for iOS apps. Students apply their knowledge and skills to developing new apps. PREREQUISITE: As required by program.

CIS245 – Cyber Defense - (3 cr. Hrs.)
The course provides students with information on the concept of cyber defense. Topics include information relative to legal aspects of cyber-attacks, threats to various levels of national and local social infrastructure, financial systems, personal data, and other direct and indirect threats. As part of this course students explore current and historical cyber threats and U.S. policy regarding infrastructure protection. PREREQUISITE: As required by program.

CIS246 – Ethical Hacking - (3 cr. hrs.)
This course emphasizes scanning, testing, and securing computer systems. The lab-intensive environment provides opportunities to understand how perimeter defenses work and how hackers are able to compromise information systems. With awareness of hacking strategies, students learn to counteract those attempts in an ethical manner. PREREQUISITE: As required by program.

CIS249 – Microcomputer Operating Systems - (3 cr. hrs.)
This course provides an introduction to microcomputer operating systems. Topics include a description of the operating system, system commands, and effective and efficient use of the microcomputer with the aid of its system programs. Upon completion, students should understand the function and role of the operating system, its operational characteristics, its configuration, how to execute programs, and efficient disk and file management. PREREQUISITE: As required by program.

CIS251 – C++ Programming - (3 cr. hrs.)
This course is an introduction to the C++ programming language including object-oriented programming. Topics include: problem solving and design; control structures; objects and events; user interface construction; and document and program testing. PREREQUISITE: As required by program.

CIS252 – Advanced C++ Programming - (3 cr. hrs.)
This course is a continuation of C++ programming. Techniques for the improvement of application and systems programming will be covered and other topics may include memory management, C Library functions, debugging, portability, and reusable code. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. PREREQUISITE: As required by program.

CIS255 – JAVA Programming - (3 cr. hrs.)
This course is an introduction to the Java programming language. Topics in this course include object-oriented programming constructs, Web page applet development, class definitions, threads, events and exceptions. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. PREREQUISITE: As required by program.

CIS256 – Advanced JAVA - (3 cr. hrs.)
This course is a second course of a sequence using the Java programming language. Topics include: Sun's Swing GUI components, JDBC, JavaBeans, RMI, servlets, and Java media framework. Upon completion, the student will be able to demonstrate knowledge of the topics through programming projects and appropriate exams. PREREQUISITE: As required by program.

CIS268 – Software Support- (3 cr. hrs.)
This course provides students with hands-on practical experience in installing computer software, operating systems, and trouble-shooting. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. This course is a suitable substitute for CIS 239, Networking Software. This is a CORE course. PREREQUISITE: As required by program.

CIS269 – Hardware Support - (3 cr. hrs.)
This course provides students with hands-on practical experience in installation and troubleshooting computer hardware. The class will help to prepare participants for the A+ Certification sponsored by CompTIA. This is a suitable substitute for CIS 240, Networking Hardware. PREREQUISITE: As required by program.

CIS270 – CISCO I CCNA- (3 cr. hrs.)
This course is the first part of a four-part curriculum leading to Cisco Certified Network Associate (CCNA) certification. The content of this course is based on current requirements from the CISCO Networking Academy certification standards. PREREQUISITE: As required by program.

CIS271 – CISCO II CCNA - (3 cr. hrs.)
This course is the second part of a four-part curriculum leading to Cisco Certified Network Associate (CCNA) certification. The content of this course is based on current requirements from the Cisco Networking Academy certification standards. PREREQUISITE: As required by program.

CIS272 – CISCO CCNA III - (3 cr. hrs.)
This course is the third part of a four-part curriculum leading to Cisco Certified Network Associate (CCNA) certification. The content of this course is based on current requirements from the Cisco Networking Academy certification standards. PREREQUISITE: As required by program.

CIS273 – CISCO CCNA IV - (3 cr. hrs.)
This course is the fourth part of a four-part curriculum leading to Cisco Certified Network Associate (CCNA) certification. The content of this course is based on current requirements from the Cisco Networking Academy certification standards. PREREQUISITE: As required by program.

CIS276 – Server Administration - (3 cr. hrs.)
This course introduces network operating system administration. Topics included in this course are network operating system software installation, administration, monitoring, and maintenance; user, group, and computer account management; shared resource management; and server hardware management. Students gain hands-on experience in managing and maintaining a network operating system environment. PREREQUISITE: As required by program.

CIS277 – Network Services Administration - (3 cr. hrs.)
This course provides an introduction to the administration of fundamental networking services and protocols. Topics included in this course are implementing, managing, and maintaining essential network operating system services such as those for client address management, name resolution, security, routing, and remote access. Students gain hands-on experience performing common network infrastructure administrative tasks. PREREQUISITE: As required by program.

CIS280 – Network Security - (3 cr. hrs.)
This course provides a study of threats to network security and methods of securing a computer network from such threats. Topics included in this course are security risks, intrusion detection, and methods of securing authentication, network access, remote access, Web access, and wired and wireless network communications. Upon completion students will be able to identify security risks and describe appropriate counter measures. PREREQUISITE: As required by program.

CIS281 – System Analysis and Design - (3 cr. hrs.)
This course is a study of contemporary theory and systems analysis and design. Emphasis is placed on investigating, analyzing, designing, implementing, and documenting computer systems. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests. PREREQUISITE: As required by program.

CIS282 – Computer Forensics - (3 cr. hrs.)
This course introduces students to methods of computer forensics and investigations. This course helps prepare students for industry specific certification. PREREQUISITES: As required by program.

CIS284 – CIS Internship - (3 cr. hrs.)
This course is designed to provide the student with an opportunity to work in a degree/program related environment. Emphasis is placed on the student's "real world" work experience as it integrates academics with practical applications that relate meaningfully to careers in the computer discipline. Significance is also placed on the efficient and accurate performance of job tasks as provided by the "real world" work experience. Grades for this course will be based on a combination of the employer's evaluation of the student, and the contents of a report submitted by the student. Upon completion of this course, the student should be able to demonstrate the ability to apply knowledge and skills gained in the classroom to a "real world" work experience. PREREQUISITE: As required by program.

CIS287 – SQL Server - (3 cr. hrs.)
This course will provide students with the technical skill required to install, configure, administer and troubleshoot SQL Server client/server database management system. At the completion of this series students will be able to: identify the features of SQL Server and the responsibilities and challenges in system administration; identify the benefits of integrating SQL Server and setup clients for SQL Server; install and configure SQL Server; manage data storage using database devices and partition data using segments; manage the user accounts; manage user permissions; identify the various task scheduling and alerting abilities of SQL Executive; identify the concepts used in replication and implement replication of data between two SQL Services; identify the types of backup and create backup devices; identify the factors effecting SQL Server performance and the need for monitoring and tuning; locate and troubleshoot problems that occur on the SQL Server. PREREQUISITE: As required by program.

CIS294 – Special Topics - (3 cr. hrs.)
This course allows study of currently relevant computer science topics, with the course being able to be repeated for credit for each different topic covered. Course content will be determined by the instructor and will vary according to the topic being covered. Upon completion, the student will be able to demonstrate knowledge of the course topic through completion of assignments and appropriate tests. PREREQUISITE: As required by program.

CIS296 – Special Topics - (3 cr. hours)
This course allows study of currently relevant computer science topics, with the course being able to be repeated for credit for each different topic covered. Course content will be determined by the instructor and will vary according to the topic being covered. Upon completion, the student will be able to demonstrate specified skills. PREREQUISITE: As required by program.

EET115 – Concepts of Digital Electronics – (5 cr. hrs.)
This course provides instruction in digital electronics. Topics include: number systems and codes, a review of Boolean algebra, logic elements, digital circuits, programmable logic circuits, and memory and computing circuits. This course provides laboratory exercises to analyze, construct, test and troubleshoot digital circuits. This course may serve as a substitute core for Digital Fundamentals in the EET, ETC, and ILT disciplines. PREREQUISITE: As required by program.

EET186 – Microprocessor Basics – (3 cr. hrs.)
An introduction to the organization and interconnection of microprocessor system components. Topics include machine architecture, arithmetic logic, data handling operations, bus concepts, interrupt concepts, subroutines, stack operations, and elementary programming. Upon completion of this course, a student will be able to program a simple microprocessor system. PREREQUISITE: As required by program.

EET232 - Microprocessor Assembler- (2 cr. hrs.)
This course introduces the student to the use of assembly language to troubleshoot and analyze microprocessor systems. Students will set up hardware, write basic assembly language programs, and test systems. Upon completion of this course a student will be able to analyze and troubleshoot microprocessor systems by way of assembly language. PREREQUISITE: As required by program.

EET254 – Microcomputer Systems Basic I – (3 cr. hrs.)
This course is a fundamental study of the systems and subsystems in a microcomputer and covers the Core Hardware requirements for A+ certification. PREREQUISITE: As required by program.

EET255 – Microcomputer Systems Basic I Lab – (2 cr. hrs.)
This course is a practical application of the techniques learned in EET 254. Upon completion, students should have the core computer hardware skills necessary for acquiring A+ certification. PREREQUISITE: As required by program.

EET256 – Microcomputer Systems Advanced I – (3 cr. hrs.)
This course is a continuation of EET 254 and 255. Topics covered in this course include operating systems and networking. Students are prepared to acquire A+ certification after completion of this course. PREREQUISITE: As required by program.

EET257 - Microcomputer Systems Advanced I Lab – (2 cr. hrs.)
This course is a continuation of EET 256 and provides opportunities for practical application of the techniques learned in EET 256. Upon completion, students should be prepared to acquire A+ certification. PREREQUISITE: As required by program.

ILT263 - Certification Prep Lab – (1 cr. hr.)
This course prepares students to sit for industry certification examinations and is to be taken in the final semester of the program. The course may be repeated to prepare students for different certification examinations as determined by the college. PREREQUISITE: As required by program.

General and Developmental Education

Art (ART)

ART100 – Art Appreciation – (3 cr. hrs.)
This course is an introduction to the appreciation of art through an examination of the themes and purposes of art, the exploration of visual arts media and methods, and culturally significant works of art from the past and present. The course informs students about the language of art and its relevance in everyday life. PREREQUISITE: As required by program.

ART203 – Art History I - (3 cr. hrs.)
This course covers the chronological development of different forms of art, such as sculpture, painting, and architecture. Emphasis is placed on history from the ancient period through the Renaissance. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles and of the impact of society on the arts. PREREQUISITE: None.

ART204 - ART HISTORY II - (3 cr. hrs.)
This course covers a study of the chronological development of different forms of art, such as sculpture, painting and architecture. Emphasis is placed on history from the Baroque to the present. Upon completion, students should be able to communicate a knowledge of time period and chronological sequence including a knowledge of themes, styles and of the impact of society on the arts. PREREQUISITE: As required by program.

Biology (BIO)

BIO103 – Principles of Biology I - (4 cr. hrs.)
This is an introductory course for science and non-science majors. It covers physical, chemical, and biological principles common to all organisms. These principles are explained through a study of cell structure and function, cellular reproduction, basic biochemistry, cell energetics, the process of photosynthesis, and Mendelian and molecular genetics. Also included are the scientific method, basic principles of evolution, and an overview of the diversity of life with emphasis on viruses, prokaryotes, and protist. A 120-minute laboratory is required. PREREQUISITE: As required by program.

BIO104 – Principles of Biology II - (4 cr. hrs.)
This course is an introduction to the basic ecological and evolutionary relationships of plants and animals and a survey of plant and animal diversity including classification, morphology, physiology, and reproduction. A 180-minute laboratory is required. PREREQUISITE: BIO103.

BIO120 – Medical Terminology - (4 cr. hrs.)
This course is a survey of words, terms, and descriptions commonly used in medical arts. Emphasis is placed on spelling, pronunciation, and meanings of prefixes, suffixes, and roots. No laboratory is required. PREREQUISITE: As required by program.

BIO201 – Human Anatomy and Physiology I - (4 cr. hrs.)

This course covers the structure and function of the human body. Included is an orientation of the human body; a study of cells and tissues, joints, the integumentary, skeletal, muscular, and nervous systems; and the senses. Dissection, histological studies, and physiology are featured in the laboratory experience. A 120-minute laboratory is required. PREREQUISITE: BIO 103.

BIO202 – Human Anatomy and Physiology II - (4 cr. hrs.)
This course covers the structure and function of the human body. Included is a study of basic nutrition and metabolism; basic principles of fluids, electrolytes, and acid-base balance; and the endocrine, respiratory, digestive, urinary, cardiovascular, lymphatic, and reproductive systems. Dissection, histological studies, and physiology are featured in the laboratory experience. A 120-minute laboratory is required. PREREQUISITE: BIO201.

BIO220 – General Microbiology - (4 cr. hrs.)
This course includes historical perspectives, cell structure and function, microbial genetics, infectious diseases, immunology, distribution, physiology, culture, identification, classification, and disease control of microorganisms. The laboratory experience includes micro-techniques, distribution, culture, identification, and control. Two 120-minute laboratories are required. PREREQUISITE: BIO103.

Basic Study Skills/Personal Development (BSS)

BSS220 – Professional Transition - (1 cr. hr.)
This course provides preparation for meeting the demands of employment or education beyond the community college experience. Emphasis is placed on strategic planning, gathering information on workplaces or colleges, and developing human interaction skills for professional, academic, and/or community life. Upon completion, students should be able to successfully make the transition to appropriate workplaces or senior institutions. PREREQUISITE: As required by program.

Chemistry (CHM)

CHM111 – College Chemistry I - (4 cr. hrs.)
This is the first course in a two-semester sequence designed for the science or engineering major who is expected to have a strong background in mathematics. Topics in this course include measurement, nomenclature, stoichiometry, atomic structure, equations and reactions, basic concepts of thermochemistry, chemical and physical properties, bonding, molecular structure, gas laws, kinetic-molecular theory, condensed matter, solutions, colloids, and some descriptive chemistry topics. Laboratory is required. PREREQUISITE: MTH112 (Precalculus Algebra) or equivalent math placement score. PREREQUISITE: As required by program.

CHM112 – College Chemistry II - (4 cr. hrs.)
This is the second course in a two-semester sequence designed primarily for the science and engineering student who is expected to have a strong background in mathematics. Topics in this course include chemical kinetics, chemical equilibria, acids and bases, ionic equilibria of weak electrolytes, solubility product principle, chemical thermodynamics, electrochemistry, oxidation-reduction, nuclear chemistry, an introduction to organic chemistry and biochemistry, atmospheric chemistry, and selected topics in descriptive chemistry including the metals, nonmetals, semi-metals, coordination compounds, transition compounds, and post-transition compounds. Laboratory is required. PREREQUISITE: CHM111 and MTH 112.

Economics (ECO)

ECO231 – Principles of Macroeconomics - (3 cr. hrs.)
This course is an introduction to macroeconomic theory, analysis, and policy applications. Topics include the following: scarcity, demand and supply, national income analysis, major economic theories concerning monetary and fiscal policies as stabilization measures, the banking system, and other economic issues or problems including international trade. PREREQUISITE: As required by program.

ECO232 – Principles of Microeconomics- (3 cr. hrs.)
This course is an introduction of the microeconomic theory, analysis, and applications. Topics include scarcity; the theories of consumer behavior, production and cost, markets, output and resource pricing, and international aspects of microeconomics. PREREQUISITE: As required by program.

English (ENG)

ENG099- Introduction to College Writing - (1-2 cr. hrs.)
This course places emphasis on providing students with additional academic and non-cognitive support with the goal of success in the students' paired ENG 101 class. The material covered or practiced in the ENG 099 course is complementary to and supportive of material taught in ENG 101 and the needs of the ENG 099 student. PREREQUISITE: None. COREQUISITE: ENG 101

ENG101 – English Composition I - (3 cr. hrs.)
English Composition I provides instruction and practice in the writing of at least four (4) extended compositions and the development of analytical and critical reading skills and basic reference and documentation skills in the composition process. English Composition I may include instruction and practice in library usage. PREREQUISITE: ENR098 or appropriate English placement score.

ENG102 – English Composition II - (3 cr. hrs.)
English Composition II provides instruction and practice in the writing of at least four formal, analytical essays, at least one of which is a research project using outside sources and/or references effectively and legally. Additionally, English Composition II provides instruction in the development of analytical and critical reading skills in the composition process. English Composition II may include instruction and practice in library usage. PREREQUISITE: A grade of "C" or better in ENG101 or the equivalent.

ENG251 – American Literature I - (3 cr. hrs.)
This course is a survey of American literature from its inception to the middle of the nineteenth century. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. PREREQUISITE: ENG102 or equivalent.

ENG252 – American Literature II - (3 cr. hrs.)
This course is a survey of American literature from the middle of the nineteenth century to the present. Emphasis is placed on representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. PREREQUISITE: ENG102 or equivalent.

ENG271 – World Literature I – (3 cr. hrs.)
This course is a study of selected literary masterpieces from Ancient Mesopotamia to the Middle Ages. Emphasis is placed on major representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. PREREQUISITE: ENG102 or equivalent.

ENG272 – World Literature II - (3 cr. hrs.)
This course is a study of selected literary masterpieces from the Renaissance to the present. Emphasis is placed on major representative works and writers of this period and on the literary, cultural, historical, and philosophical forces that shaped these works and that are reflected in them. Upon completion and in written compositions, students will be able to interpret the aesthetic and thematic aspects of these works, relate the works to their historical and literary contexts, and understand relevant criticism and research. PREREQUISITE: ENG102 or equivalent.

English/Reading (ENR)

ENR098 – Writing and Reading for College (4 cr. hrs.)
This course integrates reading and writing skills students need to comprehend and interact with college-level texts and to produce original college-level writing. Reading skills will center on processes for literal and critical comprehension, as well as the development of vocabulary skills. Writing skills will focus on using an effective writing process including generating ideas, drafting, organizing, revising and editing to produce competent essays using standard written English. This course may include a one-hour lab component. PREREQUISITES: None. COREQUISITES: None

History (HIS)

HIS121 – World History I - (3 cr. hrs.)
This course surveys social, intellectual, economic, and political developments which have molded the modern world. Focus is on both non-western and western civilizations from the prehistoric to the early modern era. PREREQUISITE: Successful completion of ENR098 or a score of or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

HIS122 – World History II - (3 cr. hrs.)
This course is a continuation of HIS 121; it covers world history, both western and non-western, from the early modern era to the present. PREREQUISITE: Successful completion of ENR098 or a score of or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

HIS201 – United States History I - (3 cr. hrs.)
This course surveys United States history from the pre-Columbian period to the Civil War era. PREREQUISITE: Successful completion of ENR098 or a score of or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

HIS202 – United States History II (3 cr. hrs.)
This course surveys United States history from the Civil War era to the Modern era. PREREQUISITE: Successful completion of ENG098 or a score of or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

Mathematics (MTH)

MTH098 – Elementary Algebra - (4cr. hrs.)
This course provides a study of the fundamentals of algebra. Topics include the real number system, linear equations and inequalities, graphing linear equations and inequalities in two variables and systems of equations. This course does not apply toward the general core requirement for mathematics. PREREQUISITE: None.

MTH099 – Support for Intermediate College Algebra – (1-2 cr. hrs.)
This learning support course provides co-requisite support in mathematics for students enrolled in MTH100. The material covered in this course is parallel to and supportive of the material taught in MTH100. Emphasis is placed on providing students with additional academic and non-cognitive support with the goal of success in the students' paired MTH100 class. This class does not apply toward the general core requirement for mathematics. PREREQUISITE: Appropriate mathematics placement score (MTH098 is not a pre-requisite for MTH099. A student who successfully completes MTH098 is eligible for MTH100 without the support course.) COREQUISITE: MTH100 Intermediate College Algebra.

MTH116 – Mathematical Applications - (3 cr. hrs.)
This course provides practical applications of mathematics and includes selected topics from consumer math and algebra. Some topics included are integers, percent, interest, ratio and proportion, metric system, probability, linear equations, and problem solving. PREREQUISITE: MTH098 or appropriate mathematics placement score.

MTH100 – Intermediate College Algebra - (3 cr. hrs.)
This course provides a study of algebraic concepts such as laws of exponents, polynomial operations, factoring polynomials, radical and rational expressions and equations and quadratic equations. Functions and relations are introducing and graphed. This course does not apply toward the general core requirement for mathematics. PREREQUISITE: MTH098 Elementary Algebra or appropriate mathematics placement score. COREQUISITE: MTH099 Support for Intermediate College Algebra, if required. (Note that MTH099 is required for students completing MTH098 Elementary Algebra.)

MTH110 – Finite Mathematics - (3 cr. hrs)
This course is intended to give an overview of topics in finite mathematics together with their applications, and is taken primarily by students who are not majoring in science, engineering, commerce, or mathematics (i.e., students who are not required to take Calculus). This course will draw on and significantly enhance the student's arithmetic and algebraic skills. The course includes sets, counting, permutations, combinations, basic probability (including Baye's Theorem), and introduction to statistics (including work with Binomial Distributions and Normal Distributions), matrices and their applications to Markov chains and decision theory. Additional topics may include symbolic logic, linear models, linear programming, the simplex method and applications. PREREQUISITE: All core mathematics courses in Alabama must have as a minimum prerequisite high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score. An alternative to this is that the student should successfully pass with a C or higher (S if taken as pass/fail) Intermediate College Algebra.

MTH112 – Pre-Calculus Algebra - (3 cr. hrs.)
This course emphasizes the algebra of functions – including polynomial, rational, exponential, and logarithmic functions. In addition, the course covers non-linear inequalities as well as systems of linear and non-linear equations and inequalities. PREREQUISITE: Successful completion of MTH 100 Intermediate College Algebra with a grade of C or higher or appropriate placement.

MTH113 – Pre-Calculus Trigonometry - (3 cr. hrs.)
This course includes the study of trigonometric (circular functions) and inverse trigonometric functions, and includes extensive work with trigonometric identities and trigonometric equations. The course also covers vectors, complex numbers, DeMoivre's Theorem, and polar coordinates. Additional topics may include conic sections, sequences, and using matrices to solve linear systems. PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with a C or higher MTH112.

MTH120 – Calculus and Its Applications - (3 cr. hrs.)
This course is intended to give a broad overview of calculus and is taken primarily by students majoring in Commerce and Business Administration. It includes differentiation and integration of algebraic, exponential, and logarithmic functions and applications to business and economics. The course should include functions of several variables, partial derivatives (including applications), Lagrange Multipliers, L'Hopital's Rule, and multiple integration (including applications). PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with a C or higher MTH112.

MTH125 – Calculus I - (4 cr. hrs.)
This is the first of three courses in the basic calculus sequence taken primarily by students in science, engineering, and mathematics. Topics include the limit of a function; the derivative of algebraic, trigonometric, exponential, and logarithmic functions; and the definite integral and its basic applications to area problems. Applications of the derivative are covered in detail, including approximations of error using differentials, maximum and minimum problems, and curve sketching using calculus. PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with a C or higher MTH113 or MTH115.

MTH126 – Calculus II - (4 cr. hrs.)
This is the second of three courses in the basic calculus sequence. Topics include vectors in the plane and in space, lines and planes in space, applications of integration (such as volume, arc length, work and average value), techniques of integration, infinite series, polar coordinates, and parametric equations. PREREQUISITE: A minimum prerequisite of high school Algebra I, Geometry, and Algebra II with an appropriate mathematics placement score is required. An alternative to this is that the student should successfully pass with a C or higher MTH 125.

MTH227 - CALCULUS III - (4 cr. hrs.)
This is the third of three courses in the basic calculus sequence. Topics include vector functions, functions of two or more variables, partial derivatives (including applications), quadric surfaces, multiple integration, and vector calculus (including Green's Theorem, Curl and Divergence, surface integrals, and Stokes' Theorem. PREREQUISITE: MTH126.

Music (MUS)

MUS101 – Music Appreciation - (3 cr. hrs.)
This is a survey course that requires no previous musical skills. The course covers a minimum of three stylistic periods of music, provides a multicultural perspective, and includes both vocal and instrumental

genres. It includes the aesthetic/stylistic characteristics of historical periods and an aural perception of the elements of music. PREREQUISITE: As required by program.

Orientation (ORI)

ORI101 – Orientation - (1 cr. hr.)
This course aids new students in their transition to the institution; exposes new students to the broad educational opportunities of the institution; and integrates new students into the life of the institution. PREREQUISITE: None.

Philosophy (PHL)

PHL206 – Ethics and Society - (3 cr. hrs.)
This course involves the study of ethical issues, which confront individuals in the course of their daily lives. The focus is on the fundamental questions of right and wrong, of human rights, and of conflicting obligations. The student should be able to understand and be prepared to make decisions in life regarding ethical issues. PREREQUISITE: Successful completion of ENR098; or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

Physical Science (PHS)

PHS111 – Physical Science I - (4 cr. hrs.)
This course provides the non-technical student with an introduction to the basic principles of geology, oceanography, meteorology, and Astronomy. Laboratory is required. PREREQUISITE: As required by program.

PHS112 – Physical Science II - (4 cr. hrs.)
This course provides the non-technical student with an introduction to the basic principle of chemistry and physics. Laboratory is required. PREREQUISITE: As required by program.

Physics (PHY)

PHY201 – General Physics I – Trig Based -(4 cr. hrs.)
This course is designed to cover general physics at a level that assures previous exposure to college algebra, basic trigonometry. Specific topics include mechanics, properties of matter and energy, thermodynamics, and periodic motion. A laboratory is required. PREREQUISITE: MTH113 or equivalent.

PHY202 – General Physics II – Trig Based - (4 cr. hrs.)
This course is designed to cover general physics using college algebra and basic trigonometry. Specific topics include wave motion, sound, light optics, electrostatics, circuits, magnetism, and modern physics. Laboratory is required. PREREQUISITE: PHY201.

PHY213 – General Physics with Calculus I - (4 cr. hrs.)
This course provides a calculus-based treatment of the principle subdivisions of classical physics: mechanics and energy, including thermodynamics. Laboratory is required. PREREQUISITE: MTH125 or Instructor permission.

PHY214 – General Physics with Calculus II - (4 cr. hrs.)
This course provides a calculus-based study in classical physics. Topics included are: simple harmonic motion, waves, sound, light, optics, electricity and magnetism. Laboratory is required. PREREQUISITE: PHY213.

Political Science (POL)

POL200 – Introduction to Political Science - (3 cr. hrs.)
This course is an introduction to the field of political science through examination of the fundamental principles, concepts, and methods of the discipline, and the basic political processes and institutions of organized political systems. Topics include approaches to political science, research methodology, the state, government, law, ideology, organized political influences, governmental bureaucracy, problems in political democracy, and international politics. Upon completion, students should be able to identify, describe, define, analyze, and explain relationships among the basic principles and concepts of political science and political processes and institutions of contemporary political systems. PREREQUISITE: None.

Psychology (PSY)

PSY200 – General Psychology - (3 cr. hrs.)
The course is a survey of the scientific study of psychological, biological, and socio-cultural factors that influence behavior and mental processes. PREREQUISITE: Successful completion of ENR098; or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

PSY210 – Human Growth and Development - (3 cr. hrs.)
This course is the study of the physical, cognitive, social, and emotional factors that affect human growth and development from conception to death. PREREQUISITE: PSY200.

Reading (RDG)

RDG114 – Critical Reading for College - (3 cr. hrs.)
This course is designed to enhance critical reading skills. Topics include vocabulary enrichment, reading flexibility, metacognitive strategies, and advanced comprehension skills, including analysis and evaluation. Upon completion, students should be able to demonstrate comprehension and analysis and respond effectively to material across disciplines. PREREQUISITE: Permission of instructor.

Religious Studies (REL)

REL100 – History of World Religions - (3 cr. Hrs.)
This course is designed to acquaint the student with the beliefs and practices of the major contemporary religions of the world. This includes religions of Africa, the Orient, and the western world. The student should have an understanding of the history and origins of the various religions of the world. PREREQUISITE: Successful completion of ENR098; or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

REL151 – Survey of the Old Testament - (3 cr. hrs.)
This course is an introduction to the content of the Old Testament with emphasis on the historical context and contemporary theological and cultural significance of the Old Testament. The student should have an understanding of the significance of the Old Testament writings upon completion of this course. PREREQUISITE: Successful completion of ENR098; or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

REL152 – Survey of the New Testament - (3 cr. hrs.)
This course is a survey of the books of the New Testament with special attention focused on the historical and geographical setting. The student should have an understanding of the books of the New Testament and the cultural and historical events associated with these writings**.** PREREQUISITE: Successful completion of ENR098; or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

Sociology (SOC)

SOC200 – Introduction to Sociology - (3 cr. hrs.)
This course is an introduction to the vocabulary, concepts, and theory of sociological perspectives of human behavior. PREREQUISITE: Successful completion of ENR098; or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

Spanish (SPA)

SPA101 – Introductory Spanish I - (4 cr. hrs.)
This course provides an introduction to Spanish. Topics include the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas. PREREQUISITE: Successful completion of ENR098; or a score of 5 or better on the WritePlacer section of Accuplacer; or a score of 18 or better on the ACT English.

SPA102 – Introductory Spanish II - (4 cr. hrs.)
This continuation course includes the development of basic communication skills and the acquisition of basic knowledge of the cultures of Spanish-speaking areas. PREREQUISITE: Spanish 101 or equivalent

Speech (SPH)

SPH106 – Fundamentals of Oral Communication - (3 cr. hrs.)
This is a performance course that includes the principles of human communication: intrapersonal, interpersonal, and public. The course surveys current communication theory and provides practical application for workforce readiness. PREREQUISITE: As required by program.

SPH107 – Fundamentals of Public Speaking - (3 cr. hrs.)
This course explores principles of audience and environment analysis as well as the actual planning, rehearsing and presenting of formal speeches to specific audiences. Historical foundations, communication theories and student performances are emphasized. PREREQUISITE: As required by program.

Theater

THR120 - Theater Appreciation - (3 cr. hrs.)
This course is designed to increase appreciation of contemporary theater. Emphasis is given to the theater as an art form through the study of history and theory of drama and the contributions to modern media, as well as emphasis of playwright, actor, director, designer and technician to modern media. Attendance at theater production may be required. PREREQUISITE: As required by program.

THR126- Introduction to Theater - (3 cr. hrs.)
This course is designed to teach the history of the theater and the principles of drama. It also covers the development of theater production and the study of selected plays as theatrical presentations. PREREQUISITE: As required by program.

Health Sciences

Medical Assisting (MAT)

MAT102 – Medical Assisting Theory I - (3 cr. hrs.)
A description of anatomical descriptors and the cell introduces the student to and serves as an overview of the body's systems. The structure and function of the nervous, sensory, integumentary, muscular, skeletal, respiratory, and cardiovascular systems are taught with the diseases related to these systems presented. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems. PREREQUISITE: As required by program.

MAT103 – Medical Assisting Theory II - (3 cr. hrs.)
The structure and function of the digestive, urinary, reproduction, endocrine, and immune systems are presented. Disease processes that are related to these systems will be included. Basic concepts of reproduction, growth and development, and nutrition are taught. Upon completion, students should be able to demonstrate a basic working knowledge of these body systems. PREREQUISITE: As required by program.

MAT111 – Clinical Procedures I for the Medical Assistant - (3 cr. hrs.)
This course includes instruction in clinical examining room procedures. Topics include asepsis, infection control, assisting with examination, and patient education. Upon completion, students will be able to demonstrate competence in exam room procedures. PREREQUISITE: As required by program.

MAT120 – Medical Administrative Procedures I - (3 cr. hrs.)
This course introduces medical office administrative procedures. Topics include appointment scheduling, telephone techniques, managing the physician's schedule, handling mail, preparing and maintaining medical records, and patient orientation. Upon completion, students should be able to perform basic medical administrative skills. PREREQUISITE: As required by program.

MAT121 – Medical Administrative Procedures II - (3 cr. hrs.)
This course introduces medical office administrative procedures not covered in Medical Administrative Procedures I. Topics include fees, credit, and collections, banking, bookkeeping, payroll, and computerized finance applications. Upon completion students should be able to manage financial aspects of medical offices. PREREQUISITE: As required by program.

MAT125 – Lab Procedures I for the Medical Assistant - (3 cr. hrs.)
This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective diagnostic tests, such as a CBC, screening and follow-up of test results and OSHA/CLIA regulations. Upon completion, students should be able to perform basic lab tests/skills based on course topics. PREREQUISITE: As required by program.

MAT200- Management of Office Emergencies - (2 cr. hrs.)
This course is designed to instruct students in handling emergencies in the medical office. Emergencies presented will include cardiovascular emergencies, diabetic emergencies, seizures, syncope, hyperthermia and hypothermia, shock, musculoskeletal emergencies, and poisoning. Upon completion, students should be able to recognize emergency situations and take appropriate actions. PREREQUISITE: As required by program.

MAT211 – Clinical Procedures II for the Medical Assistant - (3 cr. hrs.)
This course includes instruction in vital signs and special examination procedures. Emphasis is placed on interviewing skills, appropriate triage and preparing patients for diagnostic procedures. Upon completion, students should be able to assist with special procedures. PREREQUISITE: As required by program.

MAT215 – Laboratory Procedures II for the Medical Assistant - (3 cr. hrs.)
This course instructs the student in the fundamental theory and lab application for the medical office. Microbiology, urinalysis, serology, blood chemistry, and venipuncture theory as well as venipuncture collection procedures are discussed and performed. Upon completion, students should be able to perform basic lab tests/skills on course topics. PREREQUISITE: As required by program.

MAT216 – Medical Pharmacology for the Medical Office - (4 cr. hrs.)
This course teaches the commonly administered drugs used in the medical field including their classifications, actions, indications, contraindications, and side effects on the body. Correct demonstration of drug calculation, preparation, administration, and documentation are also taught. Upon completion, students should be able to demonstrate safe drug administration and recognize common medical classifications and their patient implications. PREREQUISITE: As required by program.

MAT220 – Medical Office Insurance - (3 cr. hrs.)
In this course emphasis is placed on insurance procedures with advanced diagnostic and procedural coding in the outpatient facility. Study will include correct completion of insurance forms and coding. Upon completion, students should be able to demonstrate proficiency in coding for reimbursements. PREREQUISITE: As required by program.

MAT227- Special Topics in Medical Assisting - (1 cr. hrs.)
This course includes specialized study on current topics and issues in the field of medical assisting. Emphasis is placed on personal and occupational responsibilities, and developing problem-solving skills encountered in the medical office. Upon completion, students should be able to apply problem-solving skills to medical office situations. PREREQUISITE: As required by program.

MAT228 – Medical Assistant Review Course - (1 cr. hr.)
This course includes a general review of administrative and clinical functions performed in a medical office. The course will assist the student or graduate in preparing for national credentialing examination. PREREQUISITE: As required by program.

MAT229 – Medical Assistant Practicum – (3 cr. hrs.)
This course is designed to provide the opportunity to apply clinical, laboratory, and administrative skills in a physician's office, clinic or outpatient facility. The student will gain experience in applying knowledge learned in the classroom in enhancing competence, in strengthening professional communications and interactions. Upon completion, students should be able to perform as an entry-level Medical Assistant. Content of this course is aligned with standards and guidelines from the American Association of Medical Assisting. PREREQUISITE: As required by program.

MAT239 – Phlebotomy Preceptorship – (3 cr. hrs.)
This course is designed to provide the opportunity to apply phlebotomy techniques in the physician's clinic and hospital setting. Emphasis is placed on training individuals to properly collect and handle blood specimens for laboratory testing and to interact with health care personnel, patients, and the

general public. Upon completion, students should be prepared for entry-level phlebotomy and to sit for the Phlebotomy Technician Examination (ASCP). PREREQUISITE: As required by program.

Nursing (NUR)

NUR112 Fundamental Concepts of Nursing - (7 credit hours)
This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to: healthcare delivery systems, professionalism, health promotion, psychosocial well-being, functional ability, gas exchange, safety, pharmacology, and coordinator/manager of care. PREREQUISITES: Admission to the Program COREQUISITES: BIO201 Human Anatomy & Physiology I, MTH100 Intermediate College Algebra or higher-level math.

NUR113 Nursing Concepts I - (8 credit hours)
This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to: coordinator/manager of care, perfusion, oxygenation, infection, inflammation, tissue integrity, nutrition, elimination, mobility/immobility, cellular regulation, acid/base balance, and fluid/electrolyte balance. PREREQUISITES: NUR112 Fundamental Concepts of Nursing, BIO201 Human Anatomy & Physiology I, MTH100 Intermediate College Algebra (or higher-level math).

NUR114 Nursing Concepts II - (8 credit hours)
This course teaches foundational knowledge of nursing concepts and clinical decision making to provide evidence-based nursing care. Content includes but is not limited to: coordinator/manager of care, sexuality, reproduction and childbearing, infection, inflammation, sensory perception, perfusion, cellular regulation, mood disorders and affect, renal fluid/electrolyte balance, and medical emergencies. PREREQUISITES: NUR113 Nursing Concepts I, ENG101 English Composition I, BIO202 Human Anatomy & Physiology II, PSY210 Human Growth and Development.

NUR115 Evidence Based Clinical Reasoning - (2 credit hours)
This course provides students with opportunities to collaborate with various members of the health care team in a family and community context. Students utilize clinical reasoning to assimilate concepts within the individual, health, and nursing domains. PREREQUISITES: NUR113 Nursing Concepts I, ENG101 English Composition I, BIO202 Human Anatomy & Physiology II, PSY210 Human Growth and Development. CORREQUISITIES: NUR114, SPH106 or SPH107.

NUR209 – Concepts for Healthcare Transition Students – (10 cr. hrs.)
This course focuses on application of nursing concepts to assist health care professionals to transition into the role of the registered nurse. Emphasis in this course is placed on evidenced based clinical decision making and nursing concepts provided in a family and community context for a variety of health alterations across the lifespan.

NUR211 Advanced Nursing Concepts - (7 credit hours)
This course provides opportunities for students to integrate advanced nursing care concepts within a family and community context. Content includes but is not limited to: manager of care for advanced concepts in safety, fluid/electrolyte balance, cellular regulation, gas exchange, psychosocial well-being, growth and development, perfusion, and medical emergencies. PREREQUISITES: NUR114, NUR115, SPH106/107. CORREQUISITE: BIO220

NUR221 Advanced Evidence Based Clinical Reasoning (7 credit hours)
This course provides students with opportunities to demonstrate graduate competencies through didactic and preceptorship experiences necessary to transition to the profession of nursing. Content in nursing and health care domains includes management of care, professionalism, and healthcare delivery systems. PREREQUISITES: BIO220, NUR211. CORREQUISITE: Humanities elective.

CABINET AND FACULTY

President's Cabinet

President
Dean of Student Services
Dean of Instruction
Assistant Dean of Instruction
Director of Operations
Director of Public Relations
Director of Workforce Development
Director of Fiscal Affairs
Director of Institutional Effectiveness
Director of Innovation and Program Success

Full-Time Faculty

Advanced Manufacturing

Electrical Technology (ELT)	Lardell Goodloe
Mechatronics (Industrial Maintenance)	Lardell Goodloe
Engineering Design (DDT)	Brett Ellis
Machine Tool Technology (MTT)	Tyler Williams
Welding Technology (WDT)	Joseph Bevel Kory Rafferty
Automotive Technology (ASE)	Mark Swaim
Heating and Air Conditioning Technology (ACR)	Casey Henry

Applied Services Technologies

Salon and Spa Management Technology Cosmetology/Barbering/Esthetics/Nail Care Natural Hair/Cosmetology Instructor Training (CIT)	Ben Battle Kelly Williams
Culinary Arts/Hospitality Services	Darvin McDaniel

Business, Computer Science and Engineering Technologies

Accounting Technology (ACT)	Gladys Ayokanmbi
Computer Information Systems Technology (CIS)	Ronald Egson Deloris Smothers

General and Developmental Education

Biology (BIO)	Khalid Holmes
Humanities (HUM)/(REL)/(PHL)	Russell Winn
Developmental English (ENG)/Composition and Literature	Ed Forbes Russell Winn
Developmental Math/Mathematics (MTH)	Brandi Winchester Joyce Livingston Rentz

Health Sciences Technologies

Medical Assisting Technology (MAT)	Lauren Burruss
Nursing (NUR)	Mattie Davis Pamela Laut Carlos Adams Michelle Rogers