



DRAKE STATE
COMMUNITY & TECHNICAL COLLEGE



COURSE CATALOG

2022-23

drakestate.edu



DRAKE STATE

COMMUNITY & TECHNICAL COLLEGE

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

2022– 2023 CATALOG

Effective August 2022

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Authorized by the
Alabama Community College System Board of Trustees

Approved by the
Alabama Community College System

J. F. Drake State Community and Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award Associate Degrees and Certificates. Questions about the accreditation of J.F. Drake State Community and Technical College may be directed in writing to the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by calling (404)-679-4500, or by using information available on SACSCOC's website (www.sacscoc.org).

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.

Table of Contents

Table of Contents	5
Administration and Controls	13
General Information	14
Mission Statement.....	14
About the Catalog.....	14
Campus Map.....	17
Alabama Community College System Districts.....	18
Institutional History	19
Accreditation	20
Equal Opportunity in Education and Employment Policy	21
Drake State Privacy Statement.....	22
General Policies	23
Admissions.....	23
Admission of Nursing Students	27
College Readiness Programs	38
Admission & Registration Schedules	39
Tuition Policies	39
Provisional Enrollment	40
Assessment & Placement	40
NEXT-GENERATION ACCUPLACER	42
Placement Retest Policy	42
Family Educational Rights and Privacy Act	43
Directory Information	44
Dropping and Adding Classes	44
Change of Major	44
Withdrawal from School	44
Academic Transcripts Policy	44
Attendance Policy	45
Live Work Policy	46
S.C. O’Neal Sr. Library and Technology Center	48
Computer & Technology Acceptable Use Policy	51
Student Support Services	54
Financial Information	55

Financial General Information	55
Tuition	55
Tuition and Fees 2022-2023	55
Out of State Tuition and Fees	56
Online or Hybrid Courses	56
Veteran In-State Tuition PL115-251	56
Withdrawal	57
Financial Aid Programs	59
Veteran and Military Affairs	65
Academic Policies	66
DEFINITIONS OF TERMS	70
Graduation Requirements	71
Educational Offerings	73
Non-Credit Offerings	73
Credit Offerings	76
Instructional Programs	77
Transfer Guide	78
Advanced Manufacturing	79
Building Construction Technology – AAS	79
Building Construction Technology – CER.....	80
Electrical Technology.....	81
Electrical Technology Degree- AAS	81
Electrical Wiring – CER	82
Electrical Fundamentals - STC1	83
Preventive Maintenance - STC2	83
Robotics - STC3	83
Engineering Design	84
Engineering Design Degree - AAS	84
Engineering Design- CER.....	85
Advanced Certificate - STC1	86
Mechanical Design Fundamentals - STC2.....	86
Mechanical Design Quality - STC3	87
Additive Construction Basics - STC4	87
Machine Tool	87
Machine Tool- AAS	87

Machining Fundamentals - CER	88
CNC Machining Fundamentals- CER	89
Precision Machining Milling - STC1	90
Precision Machining Fundamentals- STC2	90
Manufacturing Skills Standards Council (MSSC) Certification.....	91
MSSC - STC.....	91
Mechatronics	91
Mechatronics- AAS	91
Industrial Maintenance – CER	93
IND Electrical Fundamentals- STC1	94
Industrial Automation- STC2	94
Industrial Automation - STC4	94
Welding	94
Welding- AAS	94
Welding – CER	96
SMAW - STC1	97
GMAW- STC2	97
FCAW- STC3	97
GTAW- STC4	97
Welding Blueprint- STC5	98
Consumable Welding- STC6	98
AWS Certification- STC 7	98
SMAW Pipe Welding - STC8	98
GTAW Pipe Welding - STC9	98
SMAW Grooves - STC10	98
Automotive Technology	99
Automotive Technology - AAS	99
Automotive Technology - STC	100
Automotive Electrical - STC	100
Brakes and Suspensions - STC	101
Engine Repair - STC	101
Heating and Air Conditioning/ Refrigeration	101
Heating and Air Conditioning/ Refrigeration - AAS	101
Heating and Air Conditioning/ Refrigeration - CER	103
Heating and Air Conditioning/ Refrigeration - STC	104

Applied Services Technologies	105
Cosmetology Instructor Training- STC	105
Salon and Spa Management – Cosmetology, Barbering, Esthetics, Nail Care, and Natural Hair	105
Cosmetology - AAS	105
Barbering	107
Barbering- CER	107
Barbering- STC	108
Esthetics- CER	108
Nail Care- STC	110
Natural Hair - STC	110
Business, Computer Science, and Engineering Technologies	111
Business Administration - Accounting.....	111
Accounting - AAS	111
Accounting – STC.....	113
Accounting - STC.....	113
Business Administration - Management	113
Business Management - AAS.....	114
Business Management - STC	115
Business Management - STC	116
Business Administration – General Business.....	116
General Business – AAS	116
General Business -STC	118
General Business - STC	119
Business Administration - Entrepreneurship STC.....	119
Business Administration – Logistics and Supply Chain STC	119
Computer Information Systems	119
Computer Information Systems - AAS	119
Computer Science - STC	121
Cyber Security.....	122
Cyber Security - STC	122
Cyber Security- STC	122
Enterprise Programmer- STC	122
Google IT - STC	123
Network Administrator - STC	123
Program Coding- STC	124

Systems Administrator- STC	124
Web Developer- STC	125
General and Developmental Education	126
Associate in Arts – AA.....	126
Associate in Science - AS	127
General Education – STC	129
CHILDCARE AND DEVELOPMENT (CHD) - AAS.....	129
Child Care and Development - CER	130
Child Care and Development - STC.....	131
Child Development Associate - STC.....	131
Health Sciences.....	132
Medical Assistant	132
Medical Assistant – AAS	132
Medical Assistant - CER	133
Medical Assistant- STC	134
Medical Assistant Administrative- STC	134
Phlebotomy - STC	135
Nursing	135
Registered Nursing - AAS	135
Registered Nursing – AAS LPN to RN Mobility Program	136
Practical Nursing - CER	137
Nursing Assistant - STC.....	138
Patient Care Technician (PCT) – CER	138
Course Descriptions	139
Advanced Manufacturing Technology	139
Building Construction Technology (BUC).....	139
Electrical Technology (ELT)	141
Engineering Design (DDT)	143
Manufacturing Skills Standards Council (MSSC) Certification.....	148
Machine Tool (MTT)	149
Mechatronics	151
Welding (WDT)	154
Automotive Services (ASE)	158
Heating and Air Conditioning (ACR)	160
Applied Services Technology	162

Cosmetology Instructor Training (CIT)	162
Salon Management (SAL) – Barbering, Cosmetology, Nail Care, Esthetics. Natural Hair	163
Business, Computer Information Systems, and Engineering Technology	166
Business Administration (BUS) – Accounting, Business Management and General Business	166
Computer Information Systems (CIS)	169
General and Developmental Education	175
Art (ART)	175
Biology (BIO)	175
Basic Study Skills/Personal Development (BSS)	176
Childcare and Development (CHD)	176
Chemistry (CHM)	177
Economics (ECO)	178
English (ENG)	178
English/Reading (ENR)	179
History (HIS)	179
Mathematics (MAH)/(MTH)	179
Music (MUS)	181
Orientation (ORI)	181
Philosophy (PHL)	181
Physical Science (PHS)	181
Physics (PHY)	182
Political Science (POL)	182
Psychology (PSY)	182
Reading (RDG)	182
Religious Studies (REL)	183
Sociology (SOC)	183
Spanish (SPA)	183
Speech (SPH)	183
Theater	183
Health Sciences T – Theory; L – Lab, C – Clinical	184
Medical Assisting (MAT)	184
Nursing (NUR)	185
Patient Care Technician (PCT), Nursing Assistant (NAS), Mental Health Technician (MHT)	186
Cabinet and Faculty	189
President’s Cabinet	189

Full-Time Faculty	189
Advanced Manufacturing	189
Applied Services Technologies	189
Business, Computer Science and Engineering Technologies	189
General and Developmental Education	189
Health Sciences Technologies	189
Faculty Degrees and Credentials	190



THE PRESIDENT'S MESSAGE

Dr. Patricia Sims

On behalf of the faculty and staff of Drake State Community and Technical College, it is my pleasure to welcome you to Drake State. I commend you on making the decision to invest in your academic and professional career. You have made the right choice and a decision that will prove to be invaluable to your future.

Drake State continues to provide high-quality, affordable, post-secondary educational opportunities to the greater Huntsville community. Thousands of students have been enriched by the value of a Drake State education. Our student-centered faculty and staff are committed to your success. Our goal is to provide you with the best education and training and resources to support you as you work towards your goals.

Whether you are beginning your journey as a dual-enrollment student, transfer student, a career and technical education student, adult learner or a recent high school graduate, we launch great careers. We are proud of the contributions that Drake graduates are making throughout the community and state.

From the moment you arrive on campus, it is our mission to assist you with achieving your goal of attaining a certificate and/or degree to move forward in establishing your professional profile and career advancement. I encourage you to meet with your Success Advisor and discuss your Personal Program Map for completing your program. The faculty and staff are available to assist you on campus or virtually. I encourage you to stay connected with us, ask questions, talk to your instructors and explore all of the resources available to you.

Again, welcome to the Drake State family. We look forward to seeing you on campus or online and to making your "Your Future – Our Focus".

Dr. Patricia Sims
President

Administration and Controls

Alabama Community College System Board of Trustees
Governor Kay Ivey

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

Congressional District 1
Mr. Jeb Shell

Congressional District 2
Mr. John Mitchell

Congressional District 3
Mrs. Valerie Gray

Congressional District 4
Mr. Matthew Woods

Congressional District 5
Mr. Goodrich 'Dus' Rogers

Congressional District 6
Mr. Milton Davis, Chairman

Congressional District 7
Mr. Llevelyn Rhone

Member-at-large
Mr. Blake McAnally, Vice Chairman

Ex-Officio
Dr. Yvette Richardson

General Information

Mission Statement

Drake State Community and Technical College offers flexible, affordable university-transfer and technical degrees, certificates, adult and continuing education, and customized skills training to fulfill the diverse workforce of employers.

Approved by the Alabama Community College System Board of Trustees – December 9, 2020

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. All students taking 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.



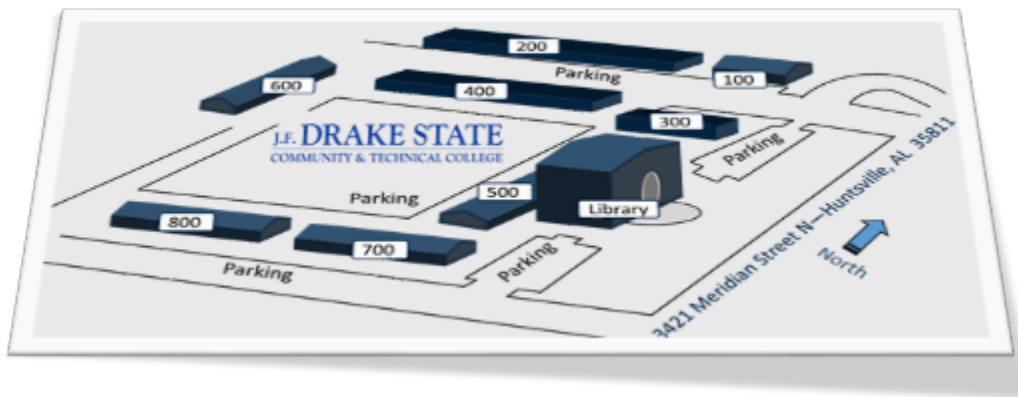
J.F. DRAKE STATE COMMUNITY AND TECHNICAL COLLEGE 2022-2023 ACADEMIC CALENDAR	
FALL SEMESTER 2022	
Professional Development Day (COLLEGE CLOSED)	Wednesday, August 10
Fall 2022 Term Regular Registration	Thursday - Tuesday, August 11 - 16
New Student Orientation	Thursday – Tuesday, August 11 – 16
Tuition and Fees Due by 4:00 pm	Tuesday, August 16
Classes Begin – Day, Evening and Mini Term 1	Wednesday August 17
Late Registration – Drop Add	Wednesday and Thursday, August 17 - 18
Tuition and Fees Due by 4:00 PM	Thursday, August 18
Labor Day Holiday (COLLEGE CLOSED)	Monday, September 5
Last Day to Receive a “W” Mini Term 1	Thursday, September 22
Last Day of Mini Term 1	Monday, October 10
Mini Term 1 Grades Due in Banner by 11:00 AM	Tuesday, October 11
Mini Term 2 Begins	Tuesday, October 11
Mini Term 2 Late Registration (Drop/Add)	Tuesday and Wednesday, October 11 -12
Midterm Exams	Monday - Sunday, October 10 -16
Midterm Grades Due by 2:00PM	Monday, October 17
Spring 2023 Registration Begins (Full, Mini 1, and Mini 2 Terms)	Tuesday, October 18
60% Completion Date for Title IV	Friday, October 21
State Professional Development	Friday, October 28
Veteran’s Day Holiday (COLLEGE CLOSED)	Friday, November 11
Last Day to Receive a “W” Full Term and Mini Term 2	Wednesday, November 16
State Professional Development (NO CLASSES)	Monday, November 21
Faculty/Staff Duty Days (NO CLASSES)	Tuesday and Wednesday, November 22 - 23
Thanksgiving Holiday (COLLEGE CLOSED)	Thursday and Friday, November 24 - 25
Final Exams	Saturday – Friday, December 3 - 9
Last Day of Full Term/Mini Term 2	Friday, December 9
Grades Due in Banner by 12:00 PM	Monday, December 12
Faculty/Staff Duty Days (NO CLASSES)	Monday – Wednesday, December 12-15
Faculty Last Day	Thursday, December 15
Staff Last Day	Friday, December 16
Christmas Holiday (COLLEGE CLOSED)	December 17 - 31
SPRING SEMESTER 2023	
Spring 2023 Regular Registration	Tuesday - Friday, January 3 - January 6
New Student Orientation	Tuesday - Friday, January 3 - January 6
Tuition and Fees Due by 4:00 pm	Friday, January 6
Classes Begin – Day, Evening, and Mini Term 1	Monday, January 9
Late Registration – Drop/Add	Monday - Tuesday, January 9 - 10
Tuition and Fees Due by 4:00 PM	Tuesday, January 10
Dr. M. L. King, JR. Birthday – Holiday (COLLEGE CLOSED)	Monday, January 16
Last Day to Receive a “W” Mini Term 1	Monday, February 27
Last Day of Mini Term 1	Monday, March 6
Mini Term 1 Grades Due in Banner by 11:00 AM	Tuesday, March 7

Mini Term 2 Begins	Tuesday, March 7
Mini Term 2 Late Registration (Drop/Add)	Tuesday and Wednesday, March 7 – 8
Midterm Exams	Monday - Sunday, March 6 -12
SPRING BREAK (Faculty and Students)	Monday – Friday, March 13 - 17
Local Holiday (COLLEGE CLOSED)	Thursday and Friday, March 16 – 17
Midterm Grades Due by 2:00PM	Monday, March 20
Summer and Fall 2023 Registration Begins (Full Term, Mini Term 1 and Mini Term 2)	Monday, March 20
60% Completion Date for Title IV	Thursday, March 23
Last Day to Receive a “W” Full Term and Mini Term 2	Monday, April 10
Last day to apply for graduation/order cap and gown	Thursday, April 13
Final Exams	Monday - Friday, May 1 – 5
Last Day of Full Term/ Mini Term 2	Friday, May 5
All Grades Due in Banner by 12:00PM Full Term and Mini Term 2	Monday, May 8
Faculty Duty Days (NO CLASSES)	Monday - Wednesday, May 8-11
Graduation	Thursday, May 11
Faculty Off/Non-Instructional Duty Days (NO CLASSES)	Friday-Friday, May 12-19
SUMMER SEMESTER 2023	
Summer 2023 Regular Registration	Monday-Wednesday, May 22-24
New Student Orientation	Monday-Wednesday, May 22-24
Tuition and Fees Due by 4:00 PM	Wednesday, May 24
Classes Begin – Day, Evening, and Mini Term 1	Thursday, May 25
Late Registration – Drop/Add	Thursday and Friday, May 25-26
Tuition and Fees Due by 2:00 AM	Friday, May 26
Memorial Day Holiday (COLLEGE CLOSED)	Monday, May 29
Last Day to Receive a “W” Mini Term 1	Tuesday, June 13
Juneteenth Holiday (COLLEGE CLOSED)	Monday, June 19
Last Day of Mini Term 1	Wednesday, June 28
Grades due in Banner by 11:00AM – Mini Term 1	Thursday, June 29
Mini Term 2 Begins	Friday, June 30
Mini Term 2 Late Registration (Drop/Add)	Friday and Monday, June 30 and July 3
Independence Day Holiday (COLLEGE CLOSED)	Tuesday, July 4
60% Completion Date for Title IV	Friday, July 7
Last Day to Receive a “W” Full Term and Mini Term 2	Friday, July 21
Final Exams/Last Day of Full Term/Mini Term 2	Tuesday-Friday, August 1-4
Last Day of Full Term/Mini Term 2	Friday, August 4
Grades are due by 12:00PM	Friday, August 4
Faculty/Staff Duty Days (NO CLASSES)	Monday - Tuesday, August 7-8
Faculty Off/Non-Instructional Duty Days (NO CLASSES)	Monday-Friday, August 9-11

INSTRUCTIONAL DAYS = 203
DUTY DAYS = 26
TOTAL DAYS = 229
Removal for Non-Payment

- All tuition and fees are due upon registration for classes. Students must pay, confirm financial aid or be enrolled in a payment plan prior to the first day of class.
- If payment is not made to the Business Office or confirmation of financial aid is not completed or payment plan not confirmed, the student's schedule will be deleted.
- Any classes added after initial payments are processed, tuition and fees must be paid in full to the Business Office or financial aid confirmed with the Financial Aid Office. If not, the student's schedule will be deleted.
- Students should login their Banner Self Service finance tab to view account balance.

Campus Map



BUILDING 100

Director of Innovation and Program Success
 Nursing Assistant
 Nursing

BUILDING 200

Electrical Technology
 Engineering Design Technology
 Mechatronics Technology
 Machine Tool Technology
 Operations Department
 Robotics

BUILDING 300

Cafetorium

BUILDING 400

Automotive Technology
 Welding Technology

BUILDING 500

Career Services
 Business Administration
 Business Office
 Developmental Office
 Director of Grants/Sponsored Services
 Computer Information System Technology
 Human Resources
 Information Technology (IT)
 Medical Assisting

BUILDING 600

Salon/Spa Management
 Student Center

BUILDING 700

Admissions
 Advising and Transfer Center
 Financial Aid
 Goal Center
 Student Success Center
 Testing and Assessment Center
 Veterans Resource Office

BUILDING 800

General Studies
 Heating & Air Conditioning Technology

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

Alabama National Guard
 Assistant Dean of Instruction
 Dean of Instruction
 Dean of Students
 Director of Institutional Effectiveness/Title III
 Director of Workforce Development
 Library
 President's Office
 Public Relations
 Student Success Specialist

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 a member of the Alabama Community College System.

The Associate Degree Nursing 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

The Practical Nursing program is accredited by the Accreditation Commission for Education in Nursing (ACEN). 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

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).



Equal Opportunity in Education and Employment Policy

The following policy statement reflects J. F. Drake State Community and Technical College's commitment to equal opportunity in education and in employment.

No person shall be denied employment, excluded from participation in, be denied the benefits of, or subject to discrimination in any program, activity or employment on the basis of race, color, disability, sex, religion, belief, national origin, or age.

J. F. Drake State Community and Technical College complies with non-discrimination regulations under Title IX of Education Amendments of 1972, which prohibits discrimination based on sex; Section 504 of the Rehabilitation Act of 1973, which prohibits violations of the rights of the disabled; Title IX, Section 106.8, which prohibits sexual harassment; Title VI, which prohibits discrimination based on race, color or national origin on the Americans with Disabilities Act of 1990.

Any person who believes himself or herself to be subjected to discrimination prohibited by the Titles or Acts or Regulations as identified above, may contact:

Title IX Coordinators

Ms. Katie Chance (Employees)
Human Resources Specialist
Building 500
3421 Meridian St N, Huntsville, AL 35811
Phone: 256-551-5214
Email: katie.chance@drakestate.edu

Ms. Tiffany Green (Students)
Student Success Specialist/ ADA
Building 700
3421 Meridian St N, Huntsville, AL 35811
Phone: 256-551-7265
Email: tiffany.green@drakestate.edu

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.

Please [click here](#) for the Title IX Sexual Harassment Complaint Procedures.

Drake State Privacy Statement

Drake State Community and Technical College respects your privacy and collects no personally identifiable information about you unless you affirmatively choose to make such information available to it. Drake State does not actively share personal information about website visitors. Personal information provided by visitors, such as e-mail addresses or information submitted via online forms, is used by the College to assist individual visitors as necessary. This assistance may involve redirecting an inquiry or comment to another College, individual or unit better suited to provide resolution.

Drake State analyzes web server log files to collect summary information about visitors to its websites. The College also subscribes to website analytics, heatmapping applications, and digital marketing platforms, which use cookies to collect anonymous traffic data. This information is analyzed by the College and by the applications to generate summary statistics for purposes such as guiding design considerations, determining successful site segments and site problem areas, and tracking marketing activities. These cookies may also record your visit to the website, the pages you have visited and the links you have followed to target advertising to your interests. The College may also share this information with third parties for this purpose. Because Drake State is a public institution, some information collected on its websites may be subject to the Alabama Open Records Act, or, in some instances, the College may be compelled by law to release information gathered on its web servers. Some web servers at Drake State may adopt different privacy statements as their specific needs require that they differ from this statement.

Drake State is an educational institution. At any time, online surveys may be conducted on the College's websites. Confidential information gathered in these online surveys is used only for the purpose indicated in the survey. Unless otherwise noted on the specified survey, your answers are confidential and individual responses will not be shared with other parties unless required by law. Aggregate data from surveys may be shared with external third parties.

Drake State complies with the Family Educational Rights and Privacy Act ("FERPA"), which generally prohibits the release of educational records without student permission.



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 (General Educational Development) 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 attends 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 transcripts 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 certified original translated and evaluated copy of the student's high school transcript.
- A current and valid passport or other official documentation to verify lawful presence.
- A current photo (passport-size, preferred).
- 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.
- A signed notarized Affidavit of support (letter from a banking institution verifying balance must be noted in U.S. dollars) verifying adequate financial support.
- Payment of I-901 Student and Exchange Visitor Information System (SEVIS) Fee.
- A medical health history with proof of vaccinations.
- Documentation demonstrating adequate health and life insurance, including repatriation, which must be maintained during all periods of enrollment.

International Transfer Students

- 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.
- A signed notarized Affidavit of support (letter from a banking institution verifying balance must be noted in U.S. dollars) verifying financial support.
- Copy of student's current Form I-20.
- Copy of student's Visa and Passport.
- A medical health history with proof of vaccinations.
- 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 completion 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:

- 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.
- Be an Alabama resident.
- Be sixty (60) years of age or older.
- 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 (Grade Point Average) 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.

****Note: Transfer work is not calculated in the student's Drake State GPA. However, if qualified, the course transferred can count toward earning a degree.***

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 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 - Associate Degree (RN (Registered Nursing) and LPN-RN Mobility) and Practical Nursing (PN)

- Unconditional admission to college
- A completed application for admission to nursing program received before published deadline.
- **ACT** composite score National or Residual or entrance exam score (**Not required for PN program**). The ACT score has no expiration date. The entrance exam scores must be dated 3 years or less from the application deadline.
- A minimum of **2.5 GPA (Grade Point Average)** 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 (General Educational Development) will be used if applicable)
- Meet 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 (Licensed Practical Nurses), 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.

The Selection Criteria to the various nursing programs are available on the [website](#).

Admission to the Nursing Programs 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 selection criteria, 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 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.
- 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.

****Failure to Comply with any of the above stipulations while in the Nursing Program constitutes grounds for dismissal from the program.***

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 Program 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 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 inflicts an undue burden on the respective College. In order to be admitted one must be able to perform all 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 Student Success Specialist.***

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.
6. 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.

7. 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.
8. Students who have not been enrolled in nursing courses for twelve months or more must apply as a new student.
9. A student must have a 2.0 cumulative GPA at the current institution for reinstatement.
10. 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.
11. 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) Student should first schedule an appointment with a nursing faculty/advisor to discuss eligibility for reinstatement.
- (2) Student must apply for reinstatement to the nursing program and submit the application with ACT test results and application for reinstatement by the following deadline:
 - (i) 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.
 - (ii) 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.
 - (iii) If repeating a course, student is responsible for all fees attached to the course.
- (3) Student must apply for readmission to college if not currently enrolled. College readmission must be accomplished by the following deadlines:
 - (i) Application for readmission must be submitted the semester *prior to* the reinstatement semester. Example: if the student applies 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.
 - (ii) 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.
 - (iii) Student is responsible for all tuition and fees associated with the courses
- (4) Student must update immunizations, CPR, drug testing, and background screening according to program policy.
- (5) Student 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. The 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 the 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

- a. Must meet minimum admission standards for the nursing program.
- b. 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.
- c. The Dean/Director of previous nursing program must provide a letter of eligibility for progression in previous nursing program.
- d. A student enrolled at another institution must secure permission from that institution by applying for admission to the College and a Transient Student Form completed by an official (Nursing Program Dean/Director) of the primary institution.
- e. Transient students must complete a Transcript Request Form at the end of the term before a transcript will be issued to the primary institution.
- f. Must comply with all program policy requirements at the accepting institution.
- g. Must meet acceptability criteria for placement at clinical agencies for clinical experience.
- h. Acceptance of a 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 programs 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 negative TB testing and follow-up, MMR, Varicella, Tetanus, and the Hepatitis B vaccination series. Other immunizations may be required as recommended by clinical sites.
- Proof of malpractice insurance coverage in amounts required by the agencies (copy of policy) and evidence that all students purchase 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 those results indicate that the student is drug free.
- Proof of current BLS (Basic Life Support) certification at Health Care Provider level. The College accepts only American Heart Association or American Red Cross certification.
- 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 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.
- Students will follow and comply with relevant policies of all clinical agencies.

Other Program Policies

The intensity of the nursing curriculum and the development of acceptable workplace habits mandate that the nursing 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 nursing 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.

All assessment and testing 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 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

Please refer to the individual course syllabi for specific testing policies for each course. If a test or assessment is not taken, the student will not get a chance to repeat the test. The final examination grade will substitute for the first missed test. Any missed test after that will result in a grade of zero for that test.

Comprehensive Assessment

Comprehensive Assessment (CA) examinations are administered for each nursing course. The CA are standardized assessments typically 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. Please note that guidelines regarding body art, makeup, hair, and nails are subject to change based on updates to the recommendations of the healthcare facilities.

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 screenings must be paid by the students.

Pre-Clinical Screening

1. 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.
2. 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.
3. Drug screening will be scheduled and conducted by a drug testing company coordinated by the Health Sciences Division. A fee will be assessed.
4. 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.
5. 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.
6. 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 a 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
16. Any other substance as recommended by healthcare agencies

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:

1. Submit a letter from a treatment provider approved by the nursing program verifying completion of an appropriate substance abuse treatment program, and;
2. Submit to an unannounced drug screen at the student's expense prior to readmission.
3. 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 with 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:
 - I. Criminal and Civil History/Records which reveal felony and misdemeanor, arrests and convictions, and pending cases usually including the date, nature of the offense, sentencing date, disposition, and current status.
 - II. **Sex Offender** which includes a search of the state or county repository for known sexual offenders.

- III. **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.
 - IV. **Office of the Inspector General (OIG)** which identifies those individuals who have committed offenses deeming them ineligible to care for patients receiving Medicare benefits.
 - V. **Employment and Education Verification**
 - I. Personal References/Interviews
 - II. Any Other Public Record
- The student will be informed of the results of significant 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 with 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 **exception of legal actions which require access to the results.**

College Readiness Programs

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: • The student must meet the entrance requirements established by institutions of postsecondary education;

- 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;
- The student must have written approval of the appropriate principal and the local superintendent of education;
- 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;
- Students may enroll in academic, career and technical or health courses in accordance with guidelines of the Department of Postsecondary Education;
- 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;
- 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
- 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.

Accelerated High School Program

Colleges are authorized to enroll accelerated high school students who may earn college credit while still in high school. Unlike the Dual Enrollment program, college credit earned under this classification may not substitute for high school credit.

Drake State Community and Technical College is authorized to enroll accelerated high school students who may earn college credit while still in high school. Unlike the Dual Enrollment program, college credit earned under this program awards college credit only; no high school credit is awarded.

The Accelerated High School Program is available to students attending public, private, parochial, or church/religious school pursuant to §16-28-1 of the Code of Alabama 1975, or who are receiving instruction from a home school offering educational instructions in grades K-12, home schooled students and those receiving instruction through private tutors.

Additional requirements beyond the general admission requirements are:

1. The student has completed the 10th grade;
2. The student provides a letter from the local principal or designee certifying that the student has a minimum cumulative 3.0 grade average and recommends the student to this program with accompanying transcript;
3. The student has completed the high school prerequisites for the course(s) in they want to enroll.

The Chancellor may grant exceptions for a student documented as gifted and talented in accordance with Alabama Administrative Code §290-8-9-12. The exceptions only apply to additional requirements 1-3 above.

Admission & Registration Schedules

Admission Schedule

Students are admitted at the beginning of each academic semester: 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 documentation to the Office of Admissions to be eligible for registration of courses.

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.

Exception: The ORI101 course is automatically waived if a student 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:

- 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.
- 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.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill>.

Assessment & Placement

The Drake State Assessment and Testing Center provides opportunities for students to meet their educational goals by offering assessments for course placement, program acceptance, and/or college admittance, as well as other exam services in an environment conducive to productive testing. The Testing Center is committed to creating a positive atmosphere where students feel comfortable and confident that they will receive services in a relaxed environment. Due to Covid 19, Testing is by appointment only, however, same day appointments are available. Please contact the Testing Center in building 700, room 705; 256-551-3116 or testing@drakestate.edu to schedule an appointment.

The following exams are offered:

- Accuplacer
- WorkKeys
- GED
- Pearson Vue Exams
- MSSC
- On campus ACT (formerly Residual ACT)

Placement Policy

Drake State will administer the Accuplacer Placement Exam to all students entering the college who do not possess previous college credit or who cannot be placed by the first two screening levels (see below).

What is the ACCUPLACER Placement Test?

ACCUPLACER is a series of tests that evaluate students' skills in reading, writing, and math to help college administrators place them in courses. ACCUPLACER supports students ready to start earning credits toward their degree as well as those who need to develop their skills before taking college-level courses. ACCUPLACER scores let students know where they stand academically, which makes it easier for them to plan a successful path toward a college degree.

Three level screening for placement

Screening Level 1: The first level will determine placement via an ACT score that is not older than 5 years. All screening will begin here.

Screening Level 2: The second level of screening 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 if the applicant is within 5 years of high school graduation.

Screening Level 3: The third level of screening will only be utilized when a student is not eligible under Level 1 and Level 2 screening. Level 3 determines placement via Accuplacer scores.

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

NEXT-GENERATION ACCUPLACER

Our Next-Generation ACCUPLACER placement tests are now available with redesigned writing and math content. Next-generation ACCUPLACER placement tests more effectively help place students in classes that match their skill level.

Next-Generation Writing evaluates a test-taker's ability to revise and edit multi-paragraph text. Questions cover two broad knowledge and skills categories, each containing three subcategories:

- Expression of Ideas
 - Development
 - Organization
 - Effective Language Use
- Standard English Conventions
 - Sentence Structure
 - Usage
 - Punctuation
- Next-Generation Quantitate Reasoning, Algebra, and Statistics (QAS) assesses the following knowledge and skills:
 - Rational Numbers
 - Ratio and Proportional Relationships
 - Exponent
 - Algebraic Expressions
 - Linear Equations
 - Linear Applications and Graphs
 - Probability Sets
 - Descriptive Statistics
 - Geometry Concepts

For upcoming session dates and registration information, contact the Testing Coordinator at (256) 551- 3116. The Drake State Testing and Assessment Center is located in Building 700 Room 705.

Placement Retest Policy

A student who wishes to challenge placement results may retest once per academic year provided there is evidence the student has completed test preparation activities. Additional preparation includes but is not limited to academic boot camps, online pre-tests, and placement test applications.

Drake State will charge a one (1) time fee for retesting per subject area of \$10. Placement test scores will be valid for three years from the date of the original or retest assessment.

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 at 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:

- Student's name, address, telephone number
- Dates of attendance
- Educational agencies or institutions most recently attended by the student
- Program of study, degree desired, and classification
- Participation in officially recognized activities, clubs, and organizations; and
- 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:

- Obtain a Withdrawal Form from Admissions.
- Obtain withdrawal clearance from the financial aid office, if applicable.
- 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 academic 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 Parchment 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 request. 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 or if the transcript is stamped "issued to student."
 - 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 to drop out of 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 (Veterans Affairs), 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:

- Tax supported programs and institutions
- Active and retired public employees/officials
- Students in Alabama Community College System institutions
- Program advisory committee members
- Charitable organizations
- The general public when the live work is of a recurring, small-scale nature, such as health and beauty services
- 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 (Alabama Community College System) 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:

- Assume all responsibility for the results of the work being done by students.
- Bear all actual costs of materials and parts involved and pay a service charge as follows:
 - 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. The college, if desired, may place up to 10% of the service charge into the college's Foundation account. In no case shall the total charge be less than \$5.00.
- 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.
- 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.

- 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.
- Colleges may have public sales of live work projects at specific times of the fiscal year so as not to compete with private enterprises. Funds collected from live work sales, after expenses, will be deposited into the college foundation account.

5. Restrictions on Live Work

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

- Live work will be performed only when it is a related learning outcome of the specific CTE (Career and Technical Education) course being offered for skills leading to employment.
- 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.
- 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 Community & Technical College. 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 the unceasing promotion of emerging technologies, serves as the model for information resource goals of the college. Students have access to books, periodicals, journals, audio/visuals, materials on reserve, as well as numerous databases and eBooks.- The library also offers a variety of technological aids along with librarians to assist with learning needs.

Drake State now has its own library platform on the college's website called EBSCO Stacks. This new addition has many excellent features to help students effortlessly navigate this library platform to discover all the library services, resources, and information about current events at the college, all in one place.

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

- 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.
- Any behavior that disturbs or endangers others is prohibited. This includes loud noises, misuse of library materials or facilities, or verbal or physical harassment.
- Cell phones must be turned off or muted. ALL cell phone conversations must be held outside the library.
- Food and/or drinks are not permitted in the library.
- Tobacco use is not allowed anywhere on campus.
- Library users are expected to follow the instructions of the library staff.
- Children 18 years of age and under must **ALWAYS be accompanied by an adult**, 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.
- 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 & Technology Center reserves 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, journals, periodicals, software programs, over 100 electronic databases available in the Alabama Virtual Library (AVL) plus the ProQuest Global NewStream database, CINAHL, Nursing Reference Center Plus and three newly acquired databases, JSTOR, OverDrive eBook collection and Films on Demand, as well as a variety of audio-visual materials and equipment for use on an individual or group basis. Other resources include Reference books, the Black Collection, Juvenile Collection, Audio-Visual Collection, and the Faculty Resource Center Collection.

The library’s services consist of access to the Internet and Wi-Fi, photocopying/fax and much more. Printing and copying services are available to students and offered at reasonable costs. The library recently procured a digital book scanner for patron and library use. Students can receive personal assistance with computers, research, or other needs from the library staff upon request.

The library staff initiated two new organizations in 2021, the Friends of the Library and the Library Book Club. Both organizations are open to staff, faculty, students, and members of the community. The Friends of the Library is a support group for library projects and promotions and the Library Book Club allows members to participate in book discussions, book signings and programs in local school systems where members read books to students and help them learn the enjoyment of reading books.

The library has a convenient drop box for returning any books or audio-visuals after hours.

Personal Computers

One open lab is 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 over 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 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 & 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 replacement costs if the material is lost or damaged. Fines are \$0.10 per day for each overdue item.

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, will provide instruction, orientation and personal assistance during regular operational hours as follows:

Monday thru Thursday- 8:00 a.m. – 5:30 p.m.

Friday - 8:00 a.m. - 12:00 p.m.

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 & 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 Students.

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 36-2530, 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 email 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-8103, 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.

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.

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 confirm 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 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 2022-2023

Semester	In-State	Facility	Technology	Building	Reserve	ACCS Enhancement	
Hours	Tuition	Fee	Fee	Fee	Fee	Fee	Total
1	125	9	9	9	1	10	163
2	250	18	18	18	2	20	326
3	375	27	27	27	3	30	489
4	500	36	36	36	4	40	652
5	625	45	45	45	5	50	815
6	750	54	54	54	6	60	978
7	875	63	63	63	7	70	1141
8	1000	72	72	72	8	80	1304
9	1125	81	81	81	9	90	1467
10	1250	90	90	90	10	100	1630
11	1375	99	99	99	11	110	1793
12	1500	108	108	108	12	120	1956
13	1625	117	117	117	13	130	2119
14	1750	126	126	126	14	140	2282
15	1875	135	135	135	15	150	2445
16	2000	144	144	144	16	160	2608
17	2125	153	153	153	17	170	2771
18	2250	162	162	162	18	180	2934
19	2375	171	171	171	19	190	3097
20	2500	180	180	180	20	200	3260
21	2625	189	189	189	21	210	3423
22	2750	198	198	198	22	220	3586
23	2875	207	207	207	23	230	3749
24	3000	216	216	216	24	240	3912

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.

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

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 GI Bill® – Active Duty Program) or chapter 33 (Post-9/11 GI 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 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 the transferor is a member of the uniformed service who is serving on active duty.
- Anyone using educational assistance under chapter 31, Vocational Readiness and 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.

Veteran Dependent In-State Tuition Under Public Law No: 117-68 (11/30/2021)

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

Veteran participants the Colonel John M. McHugh Tuition Fairness for Survivors Act of 2021

- Anyone using educational assistance under chapter 35, Dependent Education Assistance (DEA) will be charged the in-state resident rate. Effective for courses and terms beginning after November 30, 2021, a public institution of higher learning must charge the resident rate to CH35 Dependent Education Assistance (DEA) participants. When an institution charges these individuals more than the rate for resident students, VA is required to disapprove programs of education sponsored by VA.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at <https://www.benefits.va.gov/gibill>.

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: \$161.00*
- Complete Withdrawal: Lesser of 5% of tuition & fees, or \$100.00
- ACCS (Alabama Community College System) Enhancement Fee: \$10 per credit hour*

*Fees are not payable under the Alabama G.I. Dependent Scholarship Program.

Online or Hybrid Courses

Tuition for online and hybrid courses follow the same fee schedule as above. Fees are not charged for the following services:

- Application
- ID Card
- 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 postsecondary 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;

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 for federal work study positions is published on the Drake State website (pay rates are 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. Most scholarships are used to recruit 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. The **PRIORITY DEADLINE is MARCH 15TH OF**

EACH YEAR. Scholarships will be awarded annually and placed on student accounts beginning the fall semester.

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 for 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 associate 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 (ASAP): The ASAP (Alabama Student Assistance Program) 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 to receive financial aid. 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 the 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 the appeal is approved by the appeals committee, then the student will be granted one additional probation semester to establish satisfactory academic progress. If a 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.
 - Students may receive financial aid for up to 30 attempted remedial credit hours. If this number is exceeded, the student will be placed on financial aid suspension. If the student enrolls in the same remedial course more than three (3) times, financial aid will not apply for any subsequent enrollment(s) in this course.
 - 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 RNASLXX. (If a student has less than full-time enrollment, the percentage will be prorated).

Information regarding financial aid appeals includes 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 the other two components of the SAP calculation (GPA and pace).
- 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.

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 must 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.

Veteran and Military Affairs

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

Services available include:

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

Benefits for veterans include:

- Montgomery GI Bill® (Chapter 30);
- Post 9/11 GI Bill® (Chapter 33);
- Montgomery GI Bill® – SR (Chapter 1606);
- Reserve Education Assistance Program (REAP/Chapter 1607);
- Dependent Educational Assistance (DEA/Chapter 35);
- Alabama National Guard Education Assistance Program (ANGEAP);
- Alabama GI Dependent Scholarship;
- Veterans Vocational Readiness & Employment (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.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government website at <https://www.benefits.va.gov/gibill>.

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.

$$\text{Cumulative GPA} = \frac{\text{Total Quality Points Earned}}{\text{Total Hours Attempted}}$$

$$\text{Semester GPA} = \frac{\text{Semester Quality Points Earned}}{\text{Credit Hours Attempted During Semester}}$$

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.

- Students who have attempted 12-21 credit hours at Drake State must maintain a 1.5 cumulative GPA.
- Students who have attempted 22-32 credit hours at Drake State must maintain a
 - 1.75 cumulative GPA.
- 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

- 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.
- 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.
- 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

- 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.
- 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.
- It is the student’s responsibility to request of the registrar that the forgiveness policy be implemented.

Academic Bankruptcy

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

- 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.
- When academic bankruptcy is declared, the term “ACADEMIC BANKRUPTCY” will be reflected on the transcript for each semester term affected. ○ When academic bankruptcy is declared, the transcript will reflect the semester/term of its implementation and the transcripts will be stamped ‘ACADEMIC BANKRUPTCY IMPLEMENTED’.
- A student may declare academic bankruptcy only once.
- Implementation of academic bankruptcy at an institution does not guarantee that other institutions will approve such action. Respective transfer institutions will make this determination.
- 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

- 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.
- 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.
- 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.
- 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 is at or above the GPA required for the total number of credit hours attempted at the institution, the student’s status is clear.
- 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.
- 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.

- 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.
- 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

- 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
- 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
- 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 Students 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 25% 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 Students 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 Honors	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.

Conferring of Degrees

Please allow processing of two to three weeks after the end of each semester for conferred degrees to appear on transcripts.

Educational Offerings

Non-Credit Offerings

Workforce Development

The College is committed to serving its community as the primary provider of workforce development education and training for individuals looking to expand their current skills or certifications or explore a new career path, or both! These career track courses are designed to provide in-demand skills in a short timeframe.

Increasing the productivity of the existing workforce is one of the sure-fire ways of increasing the profitability of local companies in a very tight labor market. Continuous training and retraining of the workforce is important to the viability of local companies that are in the College's service area. These programs, described in the paragraphs below, include Tech Prep, Training for 76 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, sponsored industry program or grant funded. 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

The Drake State Adult Education Program provides free academic instruction ranging from basic skills up to the collegiate level along with numerous opportunities that lead to career pathways.

Adult Basic Education Classes:

Adult basic education classes consist of the following academic areas: reading, writing, math, social studies, and science.

General Educational Development (GED) Preparation Classes

The goal of these classes is to prepare adults ages 16 and over for Pearson Vue's GED Test. The General Educational Development (GED) Test is a nationally recognized assessment that gives all people an opportunity to certify their high school education. The GED Test also provides a true measure of high school achievement covering 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 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 provide 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:

The 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 assessment measures workplace skills that can affect job performance. Drake State utilizes the WorkKeys assessment to establish career readiness scores. The National Career Readiness Certificate (NCRC) is an assessment-based credential that gives employers and career seekers a uniform measure of key workplace skills.

Manufacturing and Logistics Certifications:

Drake State recognizes the importance of certifications and seeks to empower the community with skills to strengthen the local workforce. Drake State is proud to offer the following certifications:

- The *Manufacturing Skill Standards Council (MSSC)* is the nation's leading industry-led training, assessment and certification organization focused on the core technical competencies needed by the nation's frontline production and material handling workers.
- The *Certified Production Technician (CPT)* program addresses the core technical competencies of higher skilled production workers in all sectors of manufacturing. Certificates are awarded in Safety, Quality Practices & Measurement, Manufacturing Processes & Production, and Maintenance Awareness and Green Production.
- The *Certified Logistics Technician (CLT)* program addresses the core technical competencies of higher skilled, frontline material handling workers in all supply chain facilities: in factories, warehouses, distribution centers and transportation companies.

Ready to Work:

Alabama's Ready to Work program provides trainees with 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:

- The 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 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.

Credit Offerings

Instructional Programs Table

Program	Program Abbreviation	Degree	Division
ADM - Automotive Technology	ASE	AAS, STC	Advanced Manufacturing Technologies
ADM - Electrical Technology	ELT	AAS, CER, STC	Advanced Manufacturing Technologies
ADM - Engineering Design Technology	DDT	AAS, CER, STC	Advanced Manufacturing Technologies
ADM - Heating and Air Conditioning/Refrigeration	ACR	AAS, CER, STC	Advanced Manufacturing Technologies
ADM - Machine Tool Technology	MTT	AAS, CER, STC	Advanced Manufacturing Technologies
ADM - Mechatronics	INT, MTT, WDT	AAS, CER, STC	Advanced Manufacturing Technologies
ADM - Welding Technology	WDT	AAS, CER, STC	Advanced Manufacturing Technologies
Business Administration	ACT, BUS	AAS, STC	Applied Services, Business, Computer Science and Engineering Technologies
Computer Information Systems	CIS	AAS, STC	Applied Services, Business, Computer Science and Engineering Technologies
Salon Management	BAR, CIT, COS	AAS, CER, STC	Applied Services, Business, Computer Science and Engineering Technologies
Associate in Arts		AA, STC	General and Developmental Education
Associate in Science		AS, STC	General and Developmental Education
Child Development	CHD	AAS, STC	General and Developmental Education
Child Development Associate	CHA	STC	General and Developmental Education
Medical Assisting Technology	MAT	AAS, CER, STC	Health Sciences Technologies
Nursing	ADN, NUR	AAS, CER, STC	Health Sciences Technologies
Patient Care Technician	PCT	AAS, STC	Health Sciences 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 60-64 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. Area V requirements may 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 academic division, Counseling and Testing Services. 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 is 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 based on 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.

Building Construction Technology – AAS

Building Construction Program prepares individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; blueprint reading; building codes; framing; heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

Area I: Written Composition – 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 6 Credit Hours

Course	Title	Credit Hours
ART100	Art Appreciation or Other Area II	3
SPH107	Fundamentals of Public Speaking	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Course	Title	Credit Hours
MTH100	Intermediate College Algebra	3
MTH112	Precalculus Algebra	3

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
PSY200	General Psychology or other Area IV	3

Area V: Pre-Professional, Major and Elective Courses – 51 Credit Hours

Core Major – 37 Credit Hours

Course	Title	Credit Hours
BUC110	Basic Construction Tools and Materials	3
BUC113	Basic Construction Print Reading	3
BUC115	Roof and Ceiling Framing	3
BUC121	Floors and Wall Framing	3
BUC133	Building Codes	3
BUC141	On-Grade Concrete Applications	3
BUC142	Construction Estimating	3
BUC150	Homebuilders License Exam Review	3
CMT101	Construction Materials and Methods	3
CMT114	Construction Safety OSHA	1
CMT206	Construction Estimating	3
CMT208	Project Planning and Scheduling	3
DDT113	Blueprint Reading	3

Institutional Requirements - 2 Credit Hours

Note: ORI101 must be taken in the first semester.

BSS220 must be taken in the final semester.

Course	Title	Credit Hours
ORI101	Orientation to the College	1
BSS220	Professional Transitions	1

Electives - 12 Credit Hours

Course	Title	Credit Hours
ADM102	Computer Aided Design	3
BUC112	Construction Measurements & Calculations	3
CMT170	HVAC Systems	3
CMT175	Electrical and Plumbing Systems	3

Total Credit Hours – 69

Building Construction Technology – CER

Building Construction certificate program prepares individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; blueprint reading; building codes; framing; heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

Area I: Written Composition – 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours
Area III: Natural Sciences and Mathematics – 3 Credit Hours

Course	Title	Credit Hours
MTH100	Intermediate College Algebra	3

Area IV: History, Social and Behavioral Sciences – 0

Credit Hours

Area V: Pre-Professional, Major and Elective

Courses – 26 Credit Hours

Pre-Professional Major – 21 Credit Hours

Course	Title	Credit Hours
BUC110	Basic Construction Tools and Materials	3
BUC115	Roof and Ceiling Framing	3
BUC121	Floors and Wall Framing	3
BUC133	Building Codes	3
BUC141	On-Grade Concrete Applications	3
BUC142	Construction Estimating	3
CMT101	Construction Materials and Methods	3

Institutional Requirements - 2 Credit Hours

Note: ORI101 must be taken in the first semester.

BSS220 must be taken in the final semester.

Course	Title	Credit Hours
ORI101	Orientation to the College	1
BSS220	Professional Transitions	1

Electives – 3 Credit Hours

Course	Title	Credit Hours
ADM102	Computer Aided Design	3

Total Credit Hours – 32

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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 48
Credit Hours
Major Core - 33 Credit Hours

Course	Title	Credit Hours
ADM105	Fluid Systems	3
ADM111	Manu. 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/Indust. Wiring I	3
ELT209	Motor Controls I	3
ELT230	Programmable Controls	6

Electives – 15 Credit Hours
Note: ELT253, ELT254, and INT126 are highly recommended.

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM106	Quality Control Concepts	3
ELT 219	Fluid Power Systems	3
ELT231	Intro to Program. Controllers	3
ELT241	National Electric Code	3
ELT253	Industrial Robotics	3
ELT254	Robot Maint. and Trouble.	3
INT126	Preventive Maintenances	3
ADM283	CO-OP	3

Institutional Requirements - 2 Credit Hours
Note: ORI101 must be taken in the first semester. BSS220 must be taken in the final semester.

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 72
Electrical Wiring – CER
Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours
Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3

MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours
No Requirements

Area V: Pre-professional, Major and Elective Courses - 24 Credit Hours

Major Core - 24 Credit Hours

Course	Title	Credit Hours
ADM111	Manu. 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/Indust. Wiring I	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	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours - 38

Electrical Fundamentals - STC1

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM111	Manu. Safety Practices	3
ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3

Total STC1 Credit Hours - 9

Preventive Maintenance - STC2

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 12 Credit Hours

Course	Title	Credit Hours
ADM111	Manu. Safety Practices	3
ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3
INT126	Preventative Maintenance	3

Total STC2 Credit Hours - 12

Robotics - STC3

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM105	Fluid Systems	3
ELT253	Industrial Robotics	3
ELT254	Robot Maint. and Trouble.	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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4
PHY214	General Physics with Cal. II	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 39
Credit Hours
Major Core - 27 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM102	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 Dimen. & Toleranc.	3

Electives – 12 Credit Hours

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

Course	Title	Credit Hours
ADM111	Manu. Safety Practices	3
ADM114	Design Innovation	3
ADM158	Rheology	3
ADM159	Printer Safety and Maintenance	3
ADM161	Specialized Software Tech.	3
ADM208	Intermediate 3D Modeling	3
ADM216	3D Graphics and Animation	3
ADM260	Portfolio	3
ADM261	Reverse Engineering	3
ADM268	Additive Manufacturing Processes-Regolith/Concrete	3
ADM269	Slump and Viscosity	3
ADM283	CO-OP	3
DDT130	Fund. 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
GIS101	Intro to GIS Tech	2
GIS201	Introduction to Geographic Information Systems	3

GIS202	Carto Design for GIS	3
GIS221	Advanced Spatial Analysis	4
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	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 63
Engineering Design- CER
Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

Area V: Pre-professional, Major and Elective Courses - 24 Credit Hours
Major Core - 24 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM102	Computer Aided Design	3
ADM108	Intro to 3D Modeling	3
ADM110	Blueprint Reading	3
ADM114	Design Innovation	3

ADM215	Geometric Dimensioning & Tolerances	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	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours - 38
Advanced Certificate - STC1
Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM102	Computer Aided Design	3
ADM114	Design Innovation	3

Total STC2 Credit Hours - 9
Mechanical Design Fundamentals - STC2
Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM102	Computer Aided Design	3
ADM107	CAD Concepts	3

Total STC2 Credit Hours - 9

Mechanical Design Quality - STC3

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM106	Quality Control Concepts	3
ADM110	Blueprint Reading	3
ADM155	Manufacturing Projects	3
ADM215	Geometric Dimen. & Toleranc.	3

Total STC2 Credit Hours -12

Additive Construction Basics - STC4

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM102	Computer Aided Design	3
ADM107	CAD Concepts	3
ADM158	Rheology	3
ADM159	Printer Safety and Maintenance	3

Total STC4 Credit Hours - 15

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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 45 Credit Hours

Major Core – 39 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM110	Blueprint Reading	3
ADM111	Manu. Safety Practices	3
MTT107	Machining Calculations I	3
MTT139	Basic Computer Num. Control	3
MTT140	Basic Computer Num. Control Turning Programming I	3
MTT141	Basic Computer Num. 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	Intro to Machine Shop Lab II	3

MTT219	Computer Numerical Control Graphics: Turning	3
MTT220	Computer Numerical Control Graphics: Milling	3

Electives – 15 Credit Hours

Course	Title	Credit Hours
MTT125	Intro to Machining Technology	3
MTT127	Metrology	3
MTT128	Geometric Dimen. Toleranc. I	3
MTT129	Lathe Operations	6
MTT134	Lathe Operations I	3
MTT135	Lathe Operations I Lab	3
ADM102	Computer Aided Design	3
ADM106	Quality Control Concepts	3
ADM283	CO-OP	3
CNC281	Special Topics in CNC	3

Institutional Requirements - 2 credits

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 69

Machining Fundamentals - CER

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
ART100	Art Appreciation	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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

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

Credit Hours

Major Core - 21 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM110	Blueprint Reading	3
ADM111	Manu. Safety Practices	3
MTT147	Intro to Machine Shop I	3
MTT148	Intro to Machine Shop I Lab	3
MTT149	Intro to Machine Shop II	3
MTT150	Intro to Machine Shop Lab 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	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours -35
CNC Machining Fundamentals- CER
Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

Area V: Pre-professional, Major and Elective Courses - 21 Credit Hours

Major Core - 21 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM110	Blueprint Reading	3
ADM111	Manu. Safety Practices	3
MTT107	Machining Calculations I	3
MTT139	Basic Computer Num. Control	3
MTT140	Basic Computer Num. Control Turning Programming I	3
MTT141	Basic Computer Num. 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	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours -35

Precision Machining Milling - STC1

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
MTT149	Intro to Machine Shop II	3
MTT150	Intro to Machine Shop Lab II	3

Total STC1 Certificate Credit Hours 9

Precision Machining Fundamentals- STC2

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
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	Credit Hours
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 Hydraulic 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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4

CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 53 Credit Hours

Major Core – 36 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM106	Quality Control	3
ELT209	Industrial Motor Controls	3
ADM111	Manu. Safety Practices	3
MTT139	Basic Computer Num. Control	3

MTT147	Intro to Machine Shop I	3
WDT157	Consumable Welding Processes	3
INT101/ELT108	DC Fundamentals	3
INT103/ELT109	AC Fundamentals	3
INT118/ADM105	Fundamentals of Indust. Hydraulics and Pneumatics /Fluid Power Systems	3
INT158/ELT118	Industrial Wiring, I/ Industrial Wiring	3
INT206/ELT117	Industrial Motors I /Industrial Motors	3

Electives – 15 Credit Hours

Note: INT288 is highly recommended.

Course	Title	Credit Hours
ADM283	CO-OP	3
INT126	Preventive Maintenance	3
INT253/ELT253	Industrial Robotics	3
INT254/ELT254	Robot Maint. and Trouble.	3
ELT230	Programmable Controls	6
INT288	Applied Principles of Programmable Controllers	3
WKO110	NCCER Core	3

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 75

Industrial Maintenance – CER

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3

MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

Area V: Pre-professional, Major and Elective Courses - 30 Credit Hours

Major Core – 30 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM106	Quality Control	3
ADM110	Blueprint Reading	3
ADM111	Manu. Safety Practices	3
MTT139	Basic Computer Num. Control	3
MTT147	Intro to Machine Shop I	3
WDT157	Consumable Welding Processes	3
INT101/ELT108	DC Fundamentals	3
INT103/ELT109	AC Fundamentals	3
INT118/ADM105	Fundamentals of Indust. Hydraulics and Pneumatics /Fluid Power Systems	3

Institutional Requirements - 2 credits

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours - 44

IND Electrical Fundamentals- STC1

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
ADM111	Manu. Safety Practices	3
INT101/ELT108	DC Fundamentals	3
INT103/ELT109	AC Fundamentals	3

Total STC1 Certificate Credit Hours - 9

Industrial Automation- STC2

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses – 12 Credit Hours

Course	Title	Credit Hours
ADM111	Manu. Safety Practices	3
INT101/ELT108	DC Fundamentals	3
INT103/ELT109	AC Fundamentals	3
INT126	Preventive Maintenance	3

Total STC2 Certificate Credit Hours - 12

Industrial Automation - STC4

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -21 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM111	Manu. Safety Practices	3
INT101/ELT108	DC Fundamentals	3
INT103/ELT109	AC Fundamentals	3
INT126	Preventive Maintenance	3
INT253/ELT253	Industrial Robotics	3
INT254/ELT254	Robot Maint. and Trouble.	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.

Welding- AAS

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 6 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 45 Credit Hours
Major Core - 33 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
ADM106	Quality Control Concepts	3
ADM111	Manu. Safety Practices	3
WDT110	Industrial Blueprint Reading	3
WDT119	Gas Metal Arc/Flux Cored Arc	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

Electives – 12 Credit Hours

Course	Title	Credit Hours
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	3
	Groove	
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 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 69

Welding – CER

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH116.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

Area V: Pre-professional, Major and Elective Courses - 21
Credit Hours
Major Core - 21 Credit Hours

Course	Title	Credit Hours
WDT119	Gas Metal Arc/Flux Cored Arc	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	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours - 35
SMAW - STC1
Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
WDT110	Industrial Blueprint Reading	3
WDT108	SMAW Fillet/ OFC	3
WDT109	SMAW Fillet/PAC/CAC	3

Total STC1 Credit Hours - 9
GMAW- STC2
Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
WDT110	Industrial Blueprint Reading	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 – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
WDT110	Industrial Blueprint Reading	3
WDT166	Flux Core ARC Welding	3
WDT167	Flux Core ARC Welding Lab	3

Total STC3 Credit Hours - 9
GTAW- STC4
Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
WDT110	Industrial Blueprint Reading	3
WDT228	Gas Tungsten ARC Welding	3
WDT268	Gas Tungsten ARC Lab	3

Total STC4 Credit Hours - 9

Welding Blueprint- STC5

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
WDT110	Industrial Blue Printing	3
WDT219	Welding Inspection & Testing	3

Total STC5 Credit Hours - 9

Consumable Welding- STC6

Area I – IV: No Requirements

Course	Title	Credit Hours
ADM101	Precision Measurement	3
WDT157	Consumable Welding Processes	3
WDT158	Consumable Welding Processes Lab	3

Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Total STC6 Credit Hours - 9

AWS Certification- STC 7

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurement	3
WDT218	Certification	3
WDT258	Certification Lab	3

Total STC7 Credit Hours - 9

SMAW Pipe Welding - STC8

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
WDT110	Industrial Blueprint Reading	3
WDT217	SMAW Carbon Pipe	3
WDT257	SMAW Carbon Pipe Lab	3

Total STC8 Credit Hours - 9

GTAW Pipe Welding - STC9

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
WDT110	Industrial Blueprint Reading	3
WDT115	GTAW Carbon Pipe	3
WDT155	GTAW Carbon Pipe Lab	3

Total STC9 Credit Hours - 9

SMAW Grooves - STC10

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -9 Credit Hours

Course	Title	Credit Hours
WDT110	Industrial Blueprint Reading	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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 6 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 45 Credit Hours

Major Core – 42 Credit Hours

Course	Title	Credit Hours
ASE101	Fund. of Auto Technology	3
ASE112	Electrical Fundamentals	3
ASE121	Braking Systems	3
ASE122	Steering & Suspension	3
ASE/AUM124	Automotive Engines	3
ASE/AUM130	Drive Train & Axle	3
ASE133	Motor Vehicle A/C	3
ASE162	Electrical and Electronic Sys.	3
ASE212	Advanced Electrical and Electronic Systems	3
ASE224	Manual Transmission and Transaxle	3
ASE230	Automatic Transmission And Transaxle	3
ASE244	Engine Performance and Diagnostics	3
ASE246	Automotive Emissions	3
ASE263	Hybrid & Electric Vehicles	3

Electives – 6 Credit Hours

Course	Title	Credit Hours
ADM101	Precision Measurements	3
ASE220	Advanced Automotive Engines	3
ASE281	Special Topics	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	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 69

Automotive Technology - STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective

Courses - 24 Credit Hours

Course	Title	Credit Hours
ASE101	Fund. of Auto Technology	3
ASE112	Electrical Fundamentals	3
ASE121	Braking Systems	3
ASE122	Steering & Suspension	3
ASE/AUM124	Automotive Engines	3
ASE/AUM130	Drive Train & Axle	3
ASE133	Motor Vehicle A/C	3
ASE162	Electrical and Electronic Sys.	3

Total STC Credit Hours - 24

Automotive Electrical - STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective

Courses - 9 Credit Hours

Course	Title	Credit Hours
ASE101	Fund. of Auto Technology	3
ASE112	Electrical Fundamentals	3
ASE162	Electrical and Electronic Sys.	3

Total STC Credit Hours - 9

Brakes and Suspensions - STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective

Courses - 9 Credit Hours

Course	Title	Credit Hours
ASE101	Fund. of Auto Technology	3
ASE121	Braking Systems	3
ASE122	Steering & Suspension	3

Total STC Credit Hours - 9

Engine Repair - STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective

Courses - 9 Credit Hours

Course	Title	Credit Hours
ASE101	Fund. of Auto Technology	3
ASE/AUM124	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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective
Courses – 45 Credit Hours
Major Core - 33 Credit Hours

Course	Title	Credit Hours
ACR111	Principles of Refrigeration	3
ACR112	HVACR Service Procedure	3
ACR113	Refrigeration Piping Practices	3
ACR119	Fund. of Gas Heating Systems	3
ACR120	Fund. of Electrical Heating Sys.	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

Electives – 9 Credit Hours

Course	Title	Credit Hours
ACR121	Princ. of Electricity for HVACR	3
ACR123	HVAC/R Electrical Components	3
ACR125	Fundamentals of Gas and Electrical Heating Systems	6
ACR126	Commercial Heating Sys.	3
ACR152	Heat Pump Systems	6
ACR181	Special Topics in Air Cond. and Refrigeration I	3
ACR182	Special Topics in Air Cond. and Refrigeration II	3
ACR192	HVAC Apprent. /Internship	3
ACR195	CO-OP	3

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4

CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

Area V: Pre-professional, Major and Elective Courses - 24 Credit Hours

Major Core - 24 Credit Hours

Course	Title	Credit Hours
ACR111	Principles of Refrigeration	3
ACR112	HVACR Service Procedure	3
ACR113	Refrigeration Piping Practices	3
ACR119	Fund. 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

Institutional Requirements - 2 credits

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours - 38

Heating and Air Conditioning/ Refrigeration - STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective

Courses – 21 Credit Hours

Course	Title	Credit Hours
ACR111	Principles of Refrigeration	3
ACR112	HVACR Service Procedure	3
ACR113	Refrigeration Piping Practices	3
ACR119	Fund. of Gas Heating Systems	3
ACR121	Princ. of Electricity for HVACR	3
ACR122	HVACR Electrical Circuits	3
ACR123	HVAC/R Electrical Components	3

Total STC Credit Hours - 21

Applied Services Technologies

Cosmetology Instructor Training- STC

This program 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 – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses – 18 Credit Hours

Course	Title	Credit Hours
CIT211	Teaching and Curriculum Dev.	3
CIT212	Teaching Mentorship	3
CIT213	Cosmetology Instructor Co-op	3
CIT214	Lesson Plan Methods and Dev.	3
CIT222	Aud/Vis Materials & Methods	3
CIT223	Aud/Vis Materials & Methods Applications	3

Total STC Credit Hours - 18

Salon and Spa Management – Cosmetology, Barbering, Esthetics, Nail Care, and Natural Hair

The Salon and Spa 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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 6 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3

THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 45 Credit Hours
Major Core - 36 Credit Hours

Course	Title	Credit Hours
ACT201	Entrepreneurism	3
COS111	Intro to Cosmetology	3
COS112	Intro 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 Tech.	3
COS144	Hair Shaping and Design	3
COS167	State Board Review	3
SAL133	Salon Management Technology	3

Electives – 9 Credit Hours

Course	Title	Credit Hours
BAR108	Introduction to Barbering	3
BAR111	Introduction to Barbering Lab	3
BAR112	Science of Barbering	3
BAR113	Fund. of Barbering Applications	3
BAR140	Practicum I	2
BAR141	Practicum II	2
COS134	Advanced Esthetics	3
COS146	Hair Additions	3
COS148	Nail Care Theory	3
COS149	Nail 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 Credit Hours

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

Course	Title	Credit Hours
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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3

BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

Area V: Pre-professional, Major and Elective Courses - 34 Credit Hours

Major Core - 34 Credit Hours

Course	Title	Credit Hours
BAR108	Introduction to Barbering 3	3
BAR111	Introduction to Barbering Lab	3
BAR112	Science of Barbering	3
BAR113	Fund. 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
SAL133	Salon Management Tech.	3

Institutional Requirements - 2 credits

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours - 48

Barbering- STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses – 17 Credit Hours

Course	Title	Credit Hours
BAR108	Introduction to Barbering 3	3
BAR111	Introduction to Barbering Lab	3
BAR112	Science of Barbering	3
BAR113	Fund. of Barbering Applications	3
BAR140	Practicum I	2
SAL133	Salon Management Tech.	3

Total STC Credit Hours - 17

Esthetics- CER

The Esthetics program is designed to train the student in the basic manipulative skills, safety judgments, proper work habits, business skills, and desirable attitudes necessary to obtain licensure and for competency in job entry-level positions in Esthetics or a related career field.

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics – 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4

MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences - 0 Credit Hours

No Requirements

Area V: Pre-professional, Major and Elective Courses - 26 Credit Hours
Major Core - 26 Credit Hours

Course	Title	Credit Hours
COS134	Advanced Esthetics	3
COS163	Facial Treatments	3
COS164	Facial Machine	3
COS165	Related Subjects Estheticians	3
COS167	State Board Review- Esthetics	3
COS168	Bacteriology and Sanitation	3
COS169	Skin Functions	3
SAL133	Salon Management Technology	3
COS120	Hair Coloring Theory and Lab Combined	3
COS144	Hair Shaping Design	3
COS167	State Board Review -Esthetics	3
SAL133	Salon Management Tech.	3

Institutional Requirements - 2 credits

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total Certificate Credit Hours - 38

Nail Care- STC

The Nail Care Program combines classroom theory with “hands-on” practice in the laboratory dealing with the promotion of healthy **nails**. The **program** is designed to provide qualified individuals the opportunity to acquire the knowledge, aptitude, and skills to obtain licensure and for competency in job entry-level positions as a Nail Technician.

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -21 Credit Hours

Course	Title	Credit Hours
COS148	Nail Care Theory	3
COS149	Nail Art Theory	3
COS152	Nail Care Applications	3

COS154	Nail Art Applications	3
COS167	State Board Review- Nails	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 – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 9 Credit Hours

Course	Title	Credit Hours
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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 42 Credit Hours
Major Core – 27 Credit Hours

Course	Title	Credit Hours
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

Electives – 15 Credit Hours

Course	Title	Credit Hours
ACT114	Introduction to Accounting Database Resources	3
ACT115	Introduction to Accounting Computer Resources	3
ACT195	Accounting Co-op	3
ACT201	Entrepreneurism	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 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 66

Accounting – STC

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours

Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS146 and MTH100 or higher

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours

Major Core – 15 Credit Hours

Course	Title	Credit Hours
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 – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 12 Credit Hours

Course	Title	Credit Hours
BUS100	Introduction to Business	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS275	Principles of Management	3

Total STC Credit Hours - 12

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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4

BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3

SOC200	Introduction to Sociology	3
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Area V: Pre-professional, Major and Elective Courses - 42 Credit Hours

Major Core – 33 Credit Hours

Course	Title	Credit Hours
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
BUS248	Managerial Accounting	3
BUS263	Legal and Social Environment of Business	3
BUS271	Business Statistics I	3
BUS275	Principals of Management	3
BUS276	Human Resource Management	3
BUS279	Small Business Management	3

Electives – 9 Credit Hours

Course	Title	Credit Hours
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
BUS245	Accounting with QuickBooks	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 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 66

Business Management - STC

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours

Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS146 and MTH100 or higher

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3

MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours

Area V: Pre-professional, Major and Elective Major Core – 15 Credit Hours

Course	Title	Credit Hours
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 – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses - 12 Credit Hours

Course	Title	Credit Hours
BUS100	Introduction to Business	3
BUS241	Principles of Accounting I	3
BUS275	Principals of Management	3
BUS276	Human Resource Management	3

Total STC Credit Hours - 12

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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 42 Credit Hours
Major Core – 24 Credit Hours

Course	Title	Credit Hours
BUS100	Introduction to Business	3
BUS215	Business Communication	3
BUS241	Principles of Accounting I	3
BUS242	Principles of Accounting II	3
BUS263	Legal and Social Environment of Business	3
BUS271	Business Statistics I	3
BUS275	Principals of Management	3
BUS276	Human Resource Management	3

Electives – 18 Credit Hours

Course	Title	Credit Hours
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 Application	3
CIS185	Computer Ethics	3
CIS196	Commercial Software Applications	3
OAD101	Basic Keyboarding	3

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 66
General Business -STC
Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours
Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS14 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4

BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours
Major Core – 15 Credit Hours

Course	Title	Credit Hours
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 – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses – 12 Credit Hours

Course	Title	Credit Hours
BUS100	Introduction to Business	3
BUS263	The Legal and Social Environments of Business	3
BUS275	Principles of Management	3
ACT201	Entrepreneurism	3

Total STC Credit Hours - 12

Business Administration - Entrepreneurship STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -15 Credit Hours

Course	Title	Credit Hours
ACT201	Entrepreneurism	3
BUS100	Introduction	3
BUS241	Principles of Accounting I	3
BUS245	Accounting with QuickBooks	3
BUS276	Human Resource Management	3

Total STC Credit Hours - 15

Business Administration – Logistics and Supply Chain STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -15 Credit Hours

Course	Title	Credit Hours
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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

Note: CIS146, MTH112 or higher, and a 4-credit hour science course are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 45 Credit Hours

Major Core – 27 Credit Hours

Course	Title	Credit Hours
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

Electives – 18 Credit Hours

Course	Title	Credit Hours
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	3
CIS222	Database Management Systems	3
CIS227	App Development with Swift II	3
CIS244	Introduction to Cyber Security	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
ACT201	Entrepreneurism	3

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 69
Computer Science - STC
Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses - 12 Credit Hours

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
CIS149	Introduction to Computers	3
CIS150	Introduction to Computer Logic and Programming	3
CIS249	Microcomputer Operating Systems	3

Total STC Credit Hours - 12

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 Credit Hours

Area II: Humanities and Fine Arts – 0 Credit Hours

Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours

Major Core – 18 Credit Hours

Course	Title	Credit Hours
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 – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses -12 Credit Hours

Course	Title	Credit Hours
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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours
Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours
Major Core – 15 Credit Hours

Course	Title	Credit Hours
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 – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses - 10 Credit Hours

Course	Title	Credit Hours
CIS120	Google IT Professional Support Technical Support Fundamentals	2
CIS121	Google IT Professional Support II Computer Networking	2
CIS122	Google IT Professional Support III Operating Systems 2	2
CIS123	Google IT Professional Support IV System Administration and It Infrastructure	2
CIS124	Google IT Professional Support V IT Security 2	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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours

Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours

Major Core – 15 Credit Hours

Course	Title	Credit Hours
CIS249	Microcomputer Operating Systems	3
CIS270	Cisco CCNA I	3
CIS271	Cisco CCNA II	3
CIS272	Cisco CCNA III	3
CIS199	Network Communication	3

Total STC Credit Hours - 24

Program Coding- STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses – 9 Credit Hours

Course	Title	Credit Hours
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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours

Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours

Major Core – 15 Credit Hours

Course	Title	Credit Hours
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 Flash web development platforms. Students successfully completing the Career Skills Certificate (CIW) qualify for associate and professional certification examinations.

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours Area III: Natural Sciences and Mathematics - 6 Credit Hours

Note: CIS146 and MTH100 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours Major Core – 15 Credit Hours

Course	Title	Credit Hours
CIS157	Introduction to App Dev. w/Swift	3
CIS220	Apple Dev. w/Swift I	3
CIS196	Commercial Software Applications	3
CIS197	Advanced Commercial Software Applications 3	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.

Associate in Arts - Guided Pathway Options

Liberal Arts
 English

**Students must check with the Senior Institution to determine which courses are required.*

Note: The detailed degree plans for the Associate in Arts (AA) Guided Pathway Options are available on the website. The Guided

Pathway AA - Options will bridge to a Baccalaureate Degree (BA).

Area I: Written Composition - 6 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 12 Credit Hours

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 or history.*

Course	Title	Credit Hours
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	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 Credit Hours

Notes: Must complete 3 semester hours in mathematics at the pre-calculus algebra (remove the comma between pre-calculus and 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	Credit Hours
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3

MTH116	Mathematical Applications	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 Cal. I	4

****NOTE:** CIS146 does not fall under math or science and should be listed under Area V.**

Area IV: History, Social and Behavioral Sciences –12 Credit Hours

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 or literature.

Course	Title	Credit Hours
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 & Development	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 18 Credit Hours

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 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AA Degree Credit Hours - 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.

**Associate in Science - Guided Pathway Options
Elementary or Early Childhood Education
Secondary Education**

- Engineering
- Biology
- Criminal Justice
- Family and Consumer Science, Nutrition, and Hospitality Management
- Mathematics
- Pre-Nursing
- Psychology
- Social Work Building
- Science

*Students must check with the Senior Institution to determine which courses are required.

Note: The detailed degree plans for the Associate in Science (AS) Guided Pathway Options are available on the website. The Guided Pathway - AS Options will bridge to a Baccalaureate Degree (BS).

Area I: Written Composition - 6 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 12 Credit Hours

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 or history.

Course	Title	Credit Hours
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	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 - 10 Credit Hours

Notes: Must complete 3 semester hours in mathematics at the pre-calculus algebra (remove the comma between pre-calculus and 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	Credit Hours
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

NOTE: CIS146 does not fall under math or science and should be listed under Area V.

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

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 or literature.

Course	Title	Credit Hours
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 & Development	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 21 Credit Hours

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 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AS Degree Credit Hours - 64
General Education – STC
Area I: Written Composition - 6 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
ART100	Art Appreciation	3

Area III: Natural Sciences and Mathematics – 7 Credit Hours

Course	Title	Credit Hours
MTH112	Pre-Calculus Algebra	3
BIO103	Principles of Biology I	4

Area IV: History, Social and Behavioral Sciences – 6 Credit Hours

Course	Title	Credit Hours
PSY200	General Psychology	3
HIS101	Western Civilization I	3

Total STC Credit Hours - 22
CHILDCARE AND DEVELOPMENT (CHD) - AAS

The Child Care and Development program provides training in child care and development for day care teachers, aides and others who wish to pursue careers as day care or nursery school teachers, Head Start professionals, etc. This program allows child care workers to meet the minimum requirements of Alabama Head Start and Child Care Standards.

Area I: Written Composition - 6 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG101	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
ART100	Art Appreciation or Other Area II	3

Area III: Natural Sciences and Mathematics - 7 Credit Hours

Course	Title	Credit Hours
MTH100	Intermediate College Algebra	3
BIO103	Introduction to Biology	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Course	Title	Credit Hours
PSY210	Human Growth and Development	3

Area V: Pre-Professional, Major and Elective Courses - 43 Credit Hours
Core Major – 33 Credit Hours

Course	Title	Credit Hours
CHD100	Introduction of Early Care and Education of Children	3
CHD201	Child Growth and Development Principles	3
CHD203	Children’s Literature and Language Development	3
CHD204	Methods and Materials for Teaching Children	3
CHD205	Program Planning for Educating Young Children	3
CHD206	Children’s Health and Safety	3
CHD210	Educating Exceptional Children	3
CHD211	Child Development Seminar	1
CHD213	Child Development Trends Seminar	3
CHD214	Families and Communities in Early Care and Education Programs	3
CHD215	Supervised Practical Experience in Child Development	3

CHD219	Supervised Practical Experience	2
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Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to the College	1
BSS220	Professional Transitions	1

Electives – 8 Credit Hours

Course	Title	Credit Hours
CIS146	Computer Aided Design	3
NAS115	CPR	2
SPH107	Fundamental Public Speaking	3

Total Credit Hours –62

Child Care and Development - CER

The Child Care and Development program provides training in child care and development for day care teachers, aides and others who wish to pursue careers as day care or nursery school teachers, HeadStart professionals, etc. This program allows child care workers to meet the minimum requirements of Alabama Head Start and Child Care Standards.

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts - 0 Credit Hours
Area III: Natural Sciences and Mathematics – 3 Credit Hours

Course	Title	Credit Hours
MTH100	Intermediate College Algebra	3

Area V: Pre-Professional, Major and Elective
Courses -24 Credit Hours
Core Major – 22 Credit Hours

Course	Title	Credit Hours
CHD100	Introduction of Early Care and Education of Children	3
CHD201	Child Growth and Development Principles	3
CHD203	Children's Literature and Language Development	3
CHD204	Methods and Materials for Teaching Children	3
CHD205	Program Planning for Educating Young Children	3
CHD206	Children's Health and Safety	3
CHD210	Educating Exceptional Children	3
CHD211	Child Development Seminar	1

Institutional Requirements - 2 Credit Hours
Note: ORI101 must be taken in the first semester.
BSS220 must be taken in the final semester.

Course	Title	Credit Hours
ORI101	Orientation to the College	1
BSS220	Professional Transitions	1

Total Credit Hours – 30
Child Care and Development - STC

The Child Care and Development program provides training in child care and development for day care teachers, aides and others who wish to pursue careers as day care or nursery school teachers, HeadStart professionals, etc. This program allows child care workers to meet the minimum requirements of Alabama Head Start and Child Care Standards.

Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses – 16 Credit Hours

Course	Title	Credit Hours
CHD100	Introduction to Early Care and Education of Children	3
CHD201	Child Growth and Developmental Principles	3
CHD203	Children's Literature	3
CHD204	Methods and Materials for Teaching Children	3
CHD205	Program Planning for Educating Young Children	3
NAS115	CPR and First Aid	1

Total STC Credit Hours - 16
Child Development Associate - STC

Child Development Associate Short Certificate, which prepares a student to enter the field of childcare as an assistant teacher in a classroom, which meets the educational component requirements for students who want to obtain a Child Development Associate credential (CDA). Students must complete 420 clock hours of approved training in a child care facility within the last five years in addition to courses listed to sit for national credentialing exam with the Council for Professional Recognition.

Area I – IV: No Requirements
Area V: Pre-professional, Major and Elective Courses – 9 Credit Hours

Course	Title	Credit Hours
CHD100	Introduction to Early Care and Education of Children	3
CHD201	Child Growth and Developmental Principles	3
CHD204	Methods and Materials for Teaching Children	3
420 Clock hours of approved child care facility training		N/A

Total STC Credit Hours - 9

Health Sciences

Medical Assistant

The Medical Assistant Program is intended to prepare students to provide patient care in physician's offices, minor emergency centers, and other types of freestanding 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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3
ENG102	English Composition II	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 10 Credit Hours

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

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Note: PSY210 prerequisite waived.

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective Courses - 40 Credit Hours

Major Core – 40 Credit Hours

Course	Title	Credit Hours
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

Electives – 0 Credit Hours

Course	Title	Credit Hours
MAT101	Medical Terminology	3

MAT122	Basic Concepts of Interpersonal Relationships	3
MAT227	Special Topics in Medical Assisting	1
MAT239	Phlebotomy Preceptorship	3
NAS115	CPR and First AID	3

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 64

Medical Assistant - CER

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3

THR126	Introduction to Theater	3
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Area III: Natural Sciences and Mathematics - 10 Credit Hours

Note: CIS146 and MTH116 or higher are required.

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours

Area V: Pre-professional, Major and Elective Courses – 24 Credit Hours

Major Core – 24 Credit Hours

Course	Title	Credit Hours
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
MAT211	Clinical Procedures II for the Medical Assistant	3

Institutional Requirements – 1 Credit Hours

Note: ORI101 must be taken in the first semester.

Course	Title	Credit Hours
ORI101	Orientation to College	1

Total Certificate Credit Hours - 41

Medical Assistant- STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective

Courses – 12 Credit Hours

Course	Title	Credit Hours
BIO120	Medical Terminology	3
MAT102	Medical Assisting Theory I	3
MAT111	Clinical Procedures I for the Medical Assistant	3
MAT120	Medical Administrative Procedures I	3

Total STC Credit Hours - 12

Medical Assistant Administrative- STC

Area I – IV: No Requirements

Area V: Pre-professional, Major and Elective

Courses – 9 Credit Hours

Course	Title	Credit Hours
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 – IV: No Requirements

Area V: Pre-professional, Major and Elective Courses – 9 Credit Hours

Course	Title	Credit Hours
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 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 6 Credit Hours

Note: Must take 1 SPH and 1 Humanities course.

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 15 Credit Hours

Note: MTH100 or higher, BIO201, BIO202, BIO220 are required.

Course	Title	Credit Hours
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
MTH100	Intermediate Algebra	3

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Note: PSY210 prerequisite waived. PSY210 is required.

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective – 6 Courses - 39 Credit Hours

Course	Title	Credit Hours
NUR112	Fundamental Concepts of Nursing	7
NUR113	Nursing Concepts 1	8
NUR114	Nursing Concepts II	8

NUR115	Evidence Based Clinical Reasoning	2
NUR211	Advanced Nursing Concepts 1	7
NUR221	Advanced Evidence-Based Clinical Reasoning	7

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 68

Registered Nursing – AAS LPN to RN Mobility Program

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 6 Credit Hours

Note: Must take 1 SPH and 1 Humanities course.

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3

THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 15 Credit Hours

Note: MTH100 or higher, BIO201, BIO202, BIO220 are required.

Course	Title	Credit Hours
BIO201	Human Anatomy & Physio. I	4
BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
MTH100	Intermediate Algebra	3

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Note: PSY210 prerequisite waived. PSY210 is required.

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective – 3 Courses - 24 Credit Hours

Course	Title	Credit Hours
NUR209	Concepts for Healthcare Transition Students	10
NUR211	Advanced Nursing Concepts 1	7
NUR221	Advanced Evidence-Based Clinical Reasoning	7

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Total AAS Degree Credit Hours - 53

Practical Nursing - CER

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 3 Credit Hours

Note: Must take SPH107.

Course	Title	Credit Hours
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	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	Fund. of Oral Communication	3
SPH107	Fund. Of Public Speaking	3
THR120	Theater Appreciation	3
THR126	Introduction to Theater	3

Area III: Natural Sciences and Mathematics - 15 Credit Hours

Note: MTH100 or higher, BIO201 and BIO202 are required

Course	Title	Credit Hours
CIS146	Microcomputer Applications	3
BIO103	Principles of Biology I	4
BIO104	Principles of Biology II	4
BIO120	Medical Terminology	3
BIO201	Human Anatomy & Physio. I	4

BIO202	Human Anatomy & Physio. II	4
BIO220	General Microbiology	4
CHM111	College Chemistry I	4
CHM112	College Chemistry II	4
MTH100	Intermediate Algebra	3
MTH110	Finite Mathematics	3
MTH112	Pre-Calculus Algebra	3
MTH113	Pre-Calculus Trigonometry	3
MTH116	Mathematical Applications	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 Cal. I	4

Area IV: History, Social and Behavioral Sciences – 3 Credit Hours

Note: PSY210 prerequisite waived. PSY210 is required.

Course	Title	Credit Hours
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 & Develop.	3
SOC200	Introduction to Sociology	3

Area V: Pre-professional, Major and Elective – 4 Courses – 25 Credit Hours

Course	Title	Credit Hours
NUR112	Fundamental Concepts of Nursing	7
NUR113	Nursing Concepts 1	8
NUR114	Nursing Concepts II	8
NUR115	Evidence Based Clinical Reasoning	2

Institutional Requirements - 1 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1

Total Certificate Credit Hours – 46

Nursing Assistant - STC

Area I to IV – no requirements

Area V: Pre-professional, Major and Elective – 3 Courses - 10 Credit Hours

Course	Title	Credit Hours
NAS/HHA111	Fundamentals of Long-Term Care	6
NAS112	Fundamentals of Long-Term Care Clinical	2
NAS115	CPR and First Aid	2

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to College	1
BSS220	Professional Transition	1

Patient Care Technician (PCT) – CER

The Patient Care Technician (PCT) program prepares persons for entry-level employment positions in a variety of healthcare settings including long-term care, home health care, and acute care as well as outpatient settings. Program graduates qualify to earn credentials in Nursing Assistant/Home Health Aide, Medication Assistant, and Patient Care Technician certification. Options also exist to gain certification in Phlebotomy and Mental Health Technician. The curriculum offers several stackable credentials which allow diversity in employment and early entry into the workforce. The program

focuses on care of clients through theory, simulated labs and clinical experiences.

Area I: Written Composition - 3 Credit Hours

Course	Title	Credit Hours
ENG101	English Composition I	3

Area II: Humanities and Fine Arts – 0 Credit Hours

Area III: Natural Sciences and Mathematics - 3 Credit Hours

Note: MAH105 or higher-level course is required.

Course	Title	Credit Hours
MAH105	Mathematics for Nurses	3

Area IV: History, Social and Behavioral Sciences – 0 Credit Hours

Area V: Pre-professional, Major and Elective Courses - 26 Credit Hours

Major Core – 24 Credit Hours

Course	Title	Credit Hours
NAS/HHA111	Fundamentals of Long-Term Care	6
NAS/HHA112	Fundamentals of Long-Term Care Clinical	2
HPS103	Foundation Competencies for Health Sciences	3
HPS114	Pharmacology for Healthcare	2
HPS112	Medical Terminology for Healthcare	3
NAS102	Medication Assistant	6
NAS115	CPR and First Aid	2

Institutional Requirements - 2 Credit Hours

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

Course	Title	Credit Hours
ORI101	Orientation to the College	1
BSS220	Professional Transitions	1

Total Credit Hours – 32

Course Descriptions

Advanced Manufacturing Technology

Building Construction Technology (BUC)

BUC110 - Basic Construction Tools and Materials - Total Credit Hours 3

This course emphasizes the tools and materials used in the construction industry. Topics include safety, hand tools, hand held power tools and construction materials. Upon completion, students should be able to work safely within the industry and operate various hand tools and power equipment.

BUC113 - Basic Construction Print Reading - Total Credit Hours 3

This course introduces students to construction print reading. Topics include symbols and abbreviations, basic plans, elevations, sections and details. Upon completion, students should be able to read basic construction plans and trade information for major crafts employed at a construction site.

BUC115 - Roof and Ceiling Framing - Total Credit Hours 3

This course focuses on construction framing above the wall-plate line. Topics include ceiling framing roof framing, and trusses. Upon completion, students should be able to frame residential ceilings and roofs, design and build trusses and apply heavy timber construction principals.

BUC121 - Floors and Walls Framing - Total Credit Hours 3

This course focuses on floor and wall layout. Topics include leveling tools, framing, layouts, and components of wall and floor framing to include beams, girders, floor joists, sub-flooring, partitions, bracing, headers, sills, doors, and corners. Upon completion, students should be able to properly perform basic construction framing procedures for floor and walls.

BUC133 - Building Codes - Total Credit Hours 3

This course focuses on building codes, real estate, and project scheduling. Topics include real estate, project planning, specifications, company structure and organization, building codes and related legal aspects. Upon completion, students should be able to identify the components of the construction process, locate information in building code books, plan construction projects and understand the implications of various real estate issues.

BUC141 - On-Grade Concrete Applications - Total Credit Hours 3

This course emphasizes techniques and principles required to design on-grade concrete forms. Topics include concrete curbs, edge forms, footing forms, concrete wall forms, concrete piers and columns, and templates with anchor bolts and dowels. Upon completion, students should be able to perform on-grade concrete slab forming, wall forming, curb forming, and set templates with anchor bolts.

BUC142 - Construction Estimating - Total Credit Hours 3

This course covers the procedures involved in planning and estimating a residential structure. Topics include labor and equipment with emphasis placed on quantity take-off of materials necessary to construct a residential structure. Upon completion, students should be able to accurately complete a take-off of materials and equipment needs and plan the labor to construct a residential structure.

BUC150 - Homebuilders License Exam Review - Total Credit Hours 3

This course prepares students to take the State Builders License exam for residential construction. Topics include basic

residential frame and finish review, basic estimating, and associated areas. With appropriate field experience, upon completion, students should qualify to take the residential contractor's exam.

CMT101 – Construction Materials and Methods - Total Credit Hours 3

The purpose of this course is to introduce the student to the materials, methods, and equipment used in building construction. Emphasis will be placed on the construction process and how the various materials and equipment relate to the different stages of the process. Upon completion of this course the student will understand the total building process, know the various materials used in each stage of construction, understand the techniques and methods used with different materials, and specify materials with essential characteristics.

CMT114 – 10 Hour OSHA Construction Safety - Total Credit Hours 1

The purpose of this course is to introduce the student to OSHA and the regulations present within the construction industry. Upon completion of this course the student will be able to identify the primary safety rules established by OSHA, know reporting procedures, as well as, being able to use the OSHA manual. Emphasis will be placed on the importance of safety, OSHA, safety programs, and safety procedures. Students completing this course will receive their ten-hour OSHA certification.

CMT170 – HVAC Systems - Total Credit Hours 3

The purpose of this course is to introduce the student to major mechanical systems used in buildings. Emphasis will be placed on heating, cooling, and ventilation equipment. Upon completion of this course the student will be knowledgeable of the basic principles of heating, cooling, ventilation, and related hardware and will understand design considerations that impact the selection of equipment.

CMT175 – Electrical & Plumbing Systems - Total Credit Hours 3

The purpose of this course is to introduce the student to the plumbing, electrical, and lighting systems used in buildings. Emphasis will be on design considerations based on plumbing and electrical codes. Upon completion of this course the student will understand the basic principles and hardware requirements in designing plumbing, electrical and lighting systems.

CMT206 – Construction Estimating - Total Credit Hours 3

The purpose of this course is to introduce the student to the principles and practices used in estimating construction costs. Emphasis will be on a methodical approach to estimating each cost element of a construction project. Upon completion of this course the student will know the methods and procedures used in estimating, making quantity surveys from working drawings, developing unit costs, developing subcontractor costs, and will be able to identify the major considerations involved in the total pricing of a construction project.

CMT208 – Project Planning and Scheduling - Total Credit Hours 3

The purpose of this course is to introduce the student to the tools and techniques used to plan, schedule and control a construction project. Students will learn how to prepare Gantt Charts and schedules using the Critical Path Method, Precedence Networks, PERT, GERT and the Linear Scheduling Method. Special emphasis will be placed on using scheduling software. Upon completion, the student will be able to prepare project schedules using various scheduling tools and technology, allocate and level resources, maintain and update a project schedule, and resolve construction delay claims.

DDT113-Blueprint Reading – Total Credit Hours 3

This course provides students with basic blueprint reading skills for various applications. Topics include terms, definitions and abbreviations, orthographic projection, dimensions and tolerances, lines and symbols, industrial application, scales, multiview projections, specifications, notes, elevations, sections, details, and schedules. Upon completion, students should be able to interpret blueprint drawings in various formats.

Electrical Technology (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 hours. PREREQUISITE: As required by program.

ADM266 – Vacuum Chambers – Operations and Risks - (3 cr. hrs.)

Students will study the operation and risk of vacuum chambers, the applications such equipment is useful for, and how to recognize and remedy outgassing contamination and pressure leaks. Students will also become familiar with the hazards room-size vacuum chambers can pose to living beings and become equipped to safely resolve issues while inside such large vacuum chambers. Lab hours may include simulations, field trips to experience vacuum chambers in industry, or experience with small vacuum chambers suitable for college use. PREREQUISITE: As required by program.

ADM267 – Additive Manufacturing Processes – In SITU Projects - (3 cr. hrs.)

Students will gain experience in situ 3D printing, particularly as it pertains to additive construction. The students may complete at least two (2) projects where they can experience the effects of 3D printing in hot and cold temperatures. Students will also become familiar with the environmental impact of their In SITU activities, such that they learn about recyclability of materials they use and discard. Students will develop the ability to adapt materials, processes, and procedures to their in-situ project conditions. They will also be able to analyze the performance and characteristics of their project conditions. They will also be able to analyze the performance and characteristics of their project from start to finish. PREREQUISITE: ADM268 and ADM269

ADM281 – Special Topics in Computerized Numerical Control - (3 cr. hrs.)

This course provides specialized instruction in various areas related to CNC. Emphasis is placed on meeting the students' needs. 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.

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 single DC motors, 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 the 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 principal concepts troubleshooting and maintenance of robots. Topics include recognizing and describing major robot components. 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 meet 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.

ADM103 - Introduction to Computer Integrated Manufacturing (Cim) Materials and Processes – (3 cr. hrs.) This course provides an overview of the materials and processes used in advanced manufacturing. In addition, this course is a basic introduction to concepts related to the computer integrated manufacturing (CIM) process. The student will be exposed to the theory behind the complete automation of a manufacturing plant with all processes functioning under computer control and digital information tying them together. The technician’s role in the process improvement of not only the cell but the full CIM system, related safety, and inspection and process adjustment are also covered

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 for 10 hours. 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 approach will be employed to develop innovative 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 architects, 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. A 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 programs (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 – (3 cr. 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.

ADM158 – Rheology - (3 cr. hrs.)

This course covers the study of deformation and flow of liquid and solid materials, particularly non-Newtonian materials, including muds, sludges, suspensions, polymers, etc. Properties such thixotropy, rheopexy, and dilatancy will be studied. Materials that exhibit combination of elastic, viscous, and plastic behavior will also be studied. Lab time will consist of hands-on study and demonstration of the principles of the material properties studied to reinforce theoretical learning of the course material. Optionally considered is dilatancy of granular materials such as soil or sand. PREREQUISITE: As required by program.

ADM159 – Printer Safety and Maintenance - (3 cr. Hrs.)

This course focuses on proper safety operations and routine maintenance on large-format Additive Manufacturing systems, particularly those dedicated to Additive Construction. PREREQUISITE: As required by program.

ADM161 - Specialized Software Techniques – (3 cr. hrs.)

In this class students will learn techniques to design for 3D printing using a 3D modeling program. Students will also be able to manipulate STL files after receiving instruction on a software program such as “Materialize.”

ADM208 - Intermediate 3D Modeling – (3 cr. hrs.)

In this course students will receive instruction on intermediate 3D modeling concepts, such as sheet metal modeling, intermediate assemblies, 3D sketching and weldments. Students will explore an introduction to prototyping and design concepts in a 3D environment. 3D software will be utilized to produce meticulously detailed construction drawings, using multi-views, section views, and auxiliary views. Proper, industry standard dimensioning with basic tolerances will be discussed and applied to parts. Emphasis will be placed on the theory as well as the mechanics of concepts using 3D and 2D applications. Upon completion, student will produce 3D models in a CAD environment, simple prototype models and working drawings based on proper industry standards. PREREQUISITES: DDT 111 & ADM 108.

Note: This course is a suitable substitute for DDT 124.

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.

AMD268 – Additive Manufacturing Processes – Regolith/Concrete - (3 cr. hrs.)

This course focuses on the tasks performed before, during, and after 3D printing a concrete structure using a large -format printer. Students will produce simple 3D-printed concrete structures as they develop their skills with concrete mixes and large-format printers. PREREQUISITE: ADM158 and ADM159

ADM269 – Additive Manufacturing Processes – Concrete Slump and Test Coupon - (3 cr. hrs.)

This courses slump and slump testing, as well as creating concrete test coupons, to identify acceptable concrete mixes for additive manufacturing. Also covered is a survey of various testing that can be done on the samples. Upon completion, students will be able to perform slump tests and create testable samples for a variety of tests. Students will also be able to interpret slump test results to determine usability of the concrete mix tested for a given application. PREREQUISITE: ADM158 and ADM159

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. PREREQUISITES: 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. PREREQUISITES: 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.

GIS101 – Introduction to Geographic Information Systems Technology - (2 cr. hrs.)

This is an introductory GIS course focusing on maps, map analysis, and an introduction to computers. Emphasis is placed on raster GIS capabilities, data acquisition, spatial databases, and using GIS and GIS trends. Upon completion, students will demonstrate the ability to use GIS in spatial analysis, output, graphics output design issues, modes of user/GIS interaction, generating complex products and using GIS for archives. PREREQUISITE: As required by program.

GIS201 – Introduction to Geographic Information Systems (3 cr. hrs.)

This course introduces students to the concepts, techniques, and tools of Geographic Information Systems (GIS), which is a computer-based data processing tool used to manage and analyze spatial information. Topics covered include data acquisition, management, manipulation, and analysis, and cartographic output for applications of GIS in scientific and technological operations such as environmental assessment, analysis or natural hazards, site analysis for business and industry, resource management, and land-use planning. Through hands-on exercises and/or projects with related software packages, students will acquire basic skills in GIS.

GIS202 – Cartographic Design for GIS (3 cr. hrs.)

This course provides a comprehensive study of GIS-applicable cartography including cartographic principles, data acquisition techniques, and methods of base map development. The course will include map projections, map scales, types of thematic maps, and map accuracy. Scanning, digitizing, and coordinate geometry techniques used in GIS base map development will be introduced through hands-on exercises and computer-assisted mapping projects. PREREQUISITE: As required by program.

GIS221 – Advanced Spatial Analysis (4 cr. hrs.)

This course will focus on GIS extensions to apply more complex functions and tools with ArcGIS. On completion of this course, students will demonstrate the use of ArcGIS Network, Spatial Analysis tools, and the application of applying theory to a range of data sets. PREREQUISITE: GIS101.

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.

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; and 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, perform and monitor the process to make the product, document product and process compliance with customer requirements, and 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, and 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.

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 meet 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.

CNC281 – Special Topics in Computerized Numerical Control – (3 cr. hrs.)

These courses provide specialized instruction in various areas related to CNC. Emphasis is placed on meeting student's needs. 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 (National Institute for Metalworking Skills) 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, work holding 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, work holding 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.

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 hours. 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. 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: 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. This is a **CORE** course and is aligned with NIMS certification standards.

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 meet 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 for 10 hours. 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) and oxy-fuel welding process. Emphasis is placed on safety, welding terminology, equipment identification, set-up and operation, and related information in the SMAW and oxy-fuel processes. At the conclusion of this course students will be able to perform SMAW welds from various positions using various types of electrodes and perform oxy-fuel manual and automatic welding and 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 pipes using the gas tungsten arc welding (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 (GMAW/FCAW) welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding techniques and base and filler metal identification. Upon completion of this course students will be able to perform GMAW/FCAW welds in various positions. 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 introduces the student to the gas metal arc and flux cored arc (GMAW/FCAW) welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding techniques and base and filler metal identification. Upon completion of this course students will be able to perform GMAW/FCAW welds in various positions. 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 pipes with gas tungsten arc welding techniques in various pipe welding 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 introduces the student to the gas metal arc and flux cored arc (GMAW/FCAW) welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding techniques and base and filler metal identification. Upon completion of this course students will be able to perform GMAW/FCAW welds in various positions. PREREQUISITE: As required by program.

WDT158 – Consumable Welding Processes Lab - (3 cr. hrs.)

This course introduces the student to the gas metal arc and flux cored arc (GMAW/FCAW) welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding techniques and base and filler metal identification. Upon completion of this course students will be able to perform GMAW/FCAW welds in various positions. 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. PREREQUISITE: 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. PREREQUISITE: 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 introduces the student to the gas metal arc and flux cored arc (GMAW/FCAW) welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding techniques and base and filler metal identification. Upon completion of this course students will be able to perform GMAW/FCAW welds in various positions. 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 nonferrous 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 nonferrous 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 pipes 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 an 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 nonferrous 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 nonferrous 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. 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. PREREQUISITE: As required by program.

ASE/AUM124 - 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. PREREQUISITES: As required by college. PREREQUISITE: As required by program.

ASE/AUM130 - Drive Train and Axles – (3 cr. 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. This is a CORE course. PREREQUISITE: As required by program.

ASE133 - Motor Vehicle Air Conditioning – (3 cr. 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. 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 repairing 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 (GMAW/FCAW) welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gases, process principles, component identification, various welding

techniques and base and filler metal identification. Upon completion of this course students will be able to perform GMAW/FCAW welds in various positions. 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 on 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 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. PREREQUISITES: 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. PREREQUISITES: 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. PREREQUISITES: 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. PREREQUISITES: 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 applications 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. PREREQUISITE: 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. PREREQUISITES: 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.

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 be 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 apparatus, 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 with 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 successfully complete 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 nonreusable 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, leadership 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, Computer Information Systems, and Engineering Technology

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 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.

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 familiarize the student with the fundamentals of American business in a global setting. PREREQUISITE: As required by program.

BUS146 – Personal Finance - (3 cr. hrs.)

This is a survey course related to managing personal finance. Topics include personal financial planning, money management, taxes, consumer credit, insurance, investments, retirement planning, and estate planning. PREREQUISITE: As required by program.

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: As required by program.

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 business communications. PREREQUISITE: As required by program.

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 statements. 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 covers topics in managerial accounting, corporations, and financial statement analysis. PREREQUISITE: BUS241.

BUS245 - Accounting with QuickBooks – (3 cr. 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. PREREQUISITES: As required by college.

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. Topics include the Constitution, the Bill of Rights, court systems, alternative dispute resolution, civil and criminal law, administrative agencies, contracts, employment law, property interests and rights, and intellectual property, business organizations, and ethics. PREREQUISITE: As required by program.

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 probability, discrete and continuous probability distributions; sampling; interval estimation; and introduction to hypothesis testing. PREREQUISITES: As required by program.

BUS272 – Business Statistics II - (3 cr. hrs.)

This course is a continuation of BUS271. This course is a continuation of BUS 271. Topics include hypothesis testing; inferences about population means, proportions, and variances; simple linear regression and correlation; multiple regression; chi-square tests; and analysis of variance. PREREQUISITE: BUS271.

BUS275 – Principles of Management - (3 cr. hrs.)

This course provides a basic study of the principles of management. Topics include planning, organizing, leading, and controlling with emphasis on practical business applications. PREREQUISITE: As required by program.

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: As required by program.

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: As required by program.

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: 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.

CIS185 – Computer Ethics – (3 cr. 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 – (3 cr. 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. PREREQUISITES: As required by college.

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 transportation. 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 IC³ 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 IC³ 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 of 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 advanced 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 – (3 cr. 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.

CIS244 – Introduction to Cybersecurity – (3 cr. hrs.)

This course will introduce students to cybersecurity, while they gain additional insight into the challenges companies face today. Students will develop an understanding of cybercrime, security principles, technologies, and procedures and techniques used to defend networks.

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 the 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 troubleshooting. 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.

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 and global development of different forms of visual art, such as sculpture, painting, and architecture. Emphasis is placed on art history from the ancient period through the Middle Ages. PREREQUISITE: As required by program.

ART204 - Art History II - (3 cr. hrs.)

This course covers the chronological and global development of different forms of visual art, such as sculpture, painting, and architecture. Emphasis is placed on art history from the Renaissance to the present. PREREQUISITE: As required by program.

Biology (BIO)

BIO103 – Principles of Biology I - (4 cr. hrs.)

This is an introductory course for both science and non-science majors. It covers physical, chemical, and biological principles common to all organisms. These principles are explained through the 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 a survey of viruses, prokaryotes, and protists. 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, fungi, and animals and a survey of plant, fungi, and animal diversity including classification, morphology, physiology, and reproduction. A 180-minute laboratory is required. PREREQUISITE: BIO103.

BIO120 – Medical Terminology - (3 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 the 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 covers the fundamental principles of microbiology, which includes the characteristics of bacteria, archaea, eukaryotes, and viruses; cell functions; chemical and physical control methods of microbial growth; and interactions between microbes and humans in relation to pathology, immunology, and the role of normal biota. The laboratory experience focuses on microbiological techniques including culturing, microscopy, staining, identification, and control of microorganisms. Two 120-minute laboratories are required. PREREQUISITE: BIO 103 (RECOMMENDED: 4 Semester Hours of Chemistry).

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.

Childcare and Development (CHD) I – theory; L – Lab, C – clinical**CHD100 INTRODUCTION OF EARLY CARE AND EDUCATION OF CHILDREN T3/L0/C0 Total Semester Credit Hours - 3**

This course introduces students to the child education and care profession. It is designed to increase understanding of the basic concepts of child development and the developmental characteristics of children from birth through age 8/9 years, including infant and toddler and pre-school years. This course is the foundation for planning appropriate activities for children and establishing appropriate expectations of young children. This class also offers an opportunity to study the developmental domains (social, emotional, cognitive/language and physical). The course includes observations of the young child in early childhood settings.

CHD201 CHILD GROWTH AND DEVELOPMENT PRINCIPLES T3/L0/C0 Total Semester Credit Hours - 3

This course is a systematic study of child growth and development from conception through early childhood, with focus on infant and toddler. Emphasis is on principles underlying physical, mental, emotional and social development, and methods of child study and practical implications. Upon completion, students will be able to use knowledge of how young children differ in development and approaches to learning to provide opportunities that support physical, social, emotional, language, cognitive, and aesthetic development. PSY 210 or PSY 211 may be used as a suitable substitute for this course for AAT and AAS degree programs at the discretion of the college.

CHD203 CHILDREN'S LITERATURE AND LANGUAGE DEVELOPMENT T3/L0/C0 Total Semester Credit Hours - 3

This course surveys appropriate literature and language arts activities designed to enhance young children's speaking, listening, pre-reading and writing skills. Emphasis is placed on developmental appropriateness as related to language. Upon completion, students should be able to create, evaluate and demonstrate activities which support a language-rich environment for young children.

CHD204 METHODS AND MATERIALS FOR TEACHING CHILDREN T3/L0/C0 Total Semester Credit Hours - 3

This course introduces basic methods and materials used in teaching young children. Emphasis is placed on students compiling a professional resource file of activities used for teaching math, language arts, science, and social studies concepts. Upon completion students will be able to demonstrate basic methods of creating learning experiences using developmentally appropriate techniques, materials, and realistic expectations, including infant and toddler and pre-school. The course includes observations of young children in a variety of childcare environments. NOTE: CGM must teach this as a 2-1-3 configuration of theory/lab hours.

CHD205 PROGRAM PLANNING FOR EDUCATING YOUNG CHILDREN T3/L0/C0 Total Semester Credit Hours - 3

This course provides students with knowledge to develop programs for early child development. Specific content includes a review of child development concepts and program contents. Upon completion students will be able to develop and evaluate effective programs for the education of young children.

CHD206 CHILDREN'S HEALTH AND SAFETY T3/L0/C0 Total Semester Credit Hours - 3

This course introduces basic health, nutrition and safety management practices for young children. Emphasis is placed on how to set up and maintain safe, healthy environments for young children including specific procedures for infants and toddlers and procedures regarding childhood illnesses and communicable diseases.

CHD210 EDUCATING EXCEPTIONAL CHILDREN T3/L0/C0 Total Semester Credit Hours - 3

This course explores the many different types of exceptionalities found in young children. Topics include speech, language, hearing and visual impairments, gifted and talented children, mental retardation, emotional, behavioral, and neurological handicaps. Upon completion, students should be able to identify appropriate strategies for working with children.

CHD211 CHILD DEVELOPMENT SEMINAR T1/L0/C0 Total Semester Credit Hours - 1

This course provides students with knowledge of a variety of issues and trends related to the childcare profession. Subject matter will vary according to industry and student needs. Upon completion students should be able to discuss special topics related to current trends and issues in child development.

CHD213 CHILD DEVELOPMENT TRENDS SEMINAR T3/L0/C0 Total Semester Credit Hours - 3

This course includes current topics in the child development field as an update to the professional caregiver industry needs determined by course topics. Upon completion of this class, students will demonstrate the competency needed in meeting the course objectives.

CHD214 FAMILIES AND COMMUNITIES IN EARLY CARE AND EDUCATION PROGRAMS T3/L0/C0 Total Semester Credit Hours - 3

This course provides students with information about working with diverse families and communities. Students will be introduced to family and community settings, the importance of relationships with children, and the pressing needs of today's society. Students will study and practice techniques for developing these important relationships and effective communication skills.

CHD215 SUPERVISED PRACTICAL EXPERIENCE IN CHILD DEVELOPMENT T0/L3/C0 Total Semester Credit Hours - 3

This course provides a minimum of 90 hours of hands-on, supervised experience in an approved program for young children. Students will develop a portfolio documenting experience gained during this course. NOTE: If students are pursuing a certificate in Infant and Toddler, placement must be in an infant and toddler environment.

CHD219 SUPERVISED PRACTICAL EXPERIENCE T0/L2/C0 Total Semester Credit Hours - 2

This course provides hands-on, supervised experienced in an approved program for young children. Emphasis is placed on performance of daily duties which are assessed by the college instructor and the cooperating teacher. Upon completion, students will be able to demonstrate competency in a childcare setting.

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 or COREQUISITE: MTH112 (Precalculus Algebra) or equivalent math placement score.

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: Grade of C or higher in both CHM111 (College Chemistry I) and MTH 112 (Precalculus Algebra).

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 to 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 provide instruction and practice in the writing of at least four 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 and information literacy. 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 extended compositions or equivalent assignments of which 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 and information literacy. 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 beginnings to the mid-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. PREREQUISITE: ENG102 or equivalent.

ENG252 – American Literature II - (3 cr. hrs.)

This course is a survey of American literature from the mid-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. PREREQUISITE: ENG102 or equivalent.

ENG271 – World Literature I – (3 cr. hrs.)

This course is a survey of world literature from its inception to the mid-seventeenth 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. PREREQUISITE: ENG102 or equivalent.

ENG272 – World Literature II - (3 cr. hrs.)

This course is a survey of world literature from the mid-seventeenth 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. 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, cultural, economic, and political developments which have molded the modern world. The focus is on both non-western and western civilizations from the prehistoric to the early modern era. PREREQUISITE: As required by program.

HIS122 – World History II - (3 cr. hrs.)

The course surveys social, intellectual, cultural, economic, and political developments which have molded the modern world. It covers world history, both western and nonwestern, from the Early Modern Era through the Post-Modern Era. PREREQUISITE: As required by program.

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: As required by program.

HIS202 – United States History II (3 cr. hrs.)

This course surveys United States history from the Civil War era to the Modern era. PREREQUISITE: As required by program.

Mathematics (MAH)/(MTH)

MAH105 – Math for Nursing - (3 cr. hrs.)

This course is a comprehensive review of arithmetic with basic algebra and introduces calculations of solutions and systems of measurement to meet practical nursing program requirement. Topics include a review of basic arithmetic, metric system conversions, ration and proportion, and conversions among and between the metric, apothecaries, and household unit systems and intravenous infusion rates as well as ethical, cultural, and legal aspects of accurate mathematic skills. Upon completion, students will demonstrate proficiency in calculating drug dosages and IV infusion rates for adults and children.

MTH116 – Mathematical Applications - (3 cr. hrs.) **This course should be listed BEFORE MTH098 since it is a lower-level math, despite the course number being higher. ** This course provides practical applications of mathematics and includes selected topics from consumer math, algebra, and geometry. The course covers integers, percent, interest, ratio and proportion, measurement systems, linear equations, and problem solving. PREREQUISITE: None

MTH098 – Elementary Algebra - (4 cr. 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 MTH 100. The material covered in this course is parallel to and supportive of the material taught in MTH 100. Emphasis is placed on providing students with additional academic and noncognitive support with the goal of success in the students' paired MTH 100 class. This course does not apply toward the general core requirement for mathematics. PREREQUISITE: Appropriate mathematics placement score or MTH098 Elementary Algebra. (Note that MTH 099 is required for students completing MTH 098 Elementary Algebra.) COREQUISITE: MTH100 Intermediate College Algebra.

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 introduced 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.)

MTH109 – Support for Finite Mathematics - (1-2 cr. hrs.)

This Learning Support course provides co-requisite support in mathematics for students enrolled in MTH 110. The material covered in this course is parallel to and supportive of the material taught in MTH 110. Emphasis is placed on providing students with additional academic and noncognitive support with the goal of success in the students' paired MTH 110 class. This course does not apply toward the general core requirement for mathematics. PREREQUISITE: Appropriate mathematics placement score or MTH 098 Elementary Algebra. (Note that MTH 109 is required for students moving directly from MTH 098 Elementary Algebra to MTH 110.) COREQUISITE: MTH 110 Finite Mathematics

MTH110 – Finite Mathematics - (3 cr. hrs.)

This course provides an overview of topics in finite mathematics together with their applications and is intended for students who are not majoring in science, engineering, commerce, or mathematics (i.e., students who are not required to take calculus). The course introduces logic, set theory, counting techniques, basic probability, statistics, and personal finance. PREREQUISITE: Grade of C or higher in MTH 098 Elementary Algebra or appropriate mathematics placement score. COREQUISITE: MTH 109 Support for Finite Mathematics OR other mandatory support, if required. (Note that MTH 109 is required for students moving from MTH 098 Elementary Algebra to MTH110.)

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 score.

MTH113 – Pre-Calculus Trigonometry - (3 cr. hrs.)

This course includes the study of trigonometric (circular) functions and inverse trigonometric functions as well as extensive work with trigonometric identities, equations, and formulas. The course also covers vectors, complex numbers, DeMoivre's Theorem, and polar graphs. Additional topics may include conic sections and product-sum formulas. PREREQUISITE- Grade of C or higher in MTH112 Pre-Calculus Algebra or appropriate placement score.

MTH120 – Calculus and Its Applications - (3 cr. hrs.)

This course is intended to give a broad overview of calculus. It includes limits, differentiation, and integration of algebraic, exponential, logarithmic, and multi-variable functions with applications to business, economics, and other disciplines. This course may also include LaGrange multipliers, extrema of functions of two variables, method of least squares, linear approximation, and linear programming. PREREQUISITE: Grade of C or higher in MTH 112, 113, or 115 or appropriate placement score.

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: Grade of C or higher in MTH 113 or 115 or appropriate placement score.

MTH126 – Calculus II - (4 cr. hrs.)

This is the second of three courses in the basic calculus sequence. Topics include applications of integration, techniques of integration, infinite series, polar coordinates, and parametric equations, lines and planes in space, and vectors in the plane and in space. PREREQUISITE: Grade of C or higher in MTH125 or appropriate placement score.

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: Grade of C or higher in 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 - (1-2 cr. hrs.)**

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: As required by program.

Philosophy (PHL)**PHL206 – Ethics and Society - (3 cr. hrs.)**

This course involves the study of ethical issues which confront individuals in contemporary society. The focus is on meta-ethics, normative ethics, and applied ethics. The student should be able to understand and be prepared to use moral reasoning in making decisions regarding ethical issues. PREREQUISITE: As required by program.

PHL 210- ETHICS AND THE HEALTH SCIENCES - (3 cr. hrs.)

This course is a study of ethical issues related to the health sciences such as contraception, abortion, and eugenics; human experimentation; truth in drugs and medicine; death and dying; and other health related issues. The student should be able to clarify relevant ethical considerations and have a philosophical basis for decisions on right and wrong, good, and bad, rights and responsibilities. PREREQUISITE: As required by program.

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 using college algebra, and basic trigonometry. Specific topics include kinematics, Newton's laws of motion, conservation of momentum and energy, and the laws of thermodynamics. The contributions of physics to modern technology and society are considered. A laboratory is required. PREREQUISITE: MTH113 or equivalent.

PHY202 – General Physics II – Trig Based - (4 cr. hrs.)

This continuation course is designed to cover general physics using college algebra and basic trigonometry. Specific topics include wave mechanics, electromagnetism, light, and optics. The contributions of physics to modern technology and society are considered. Laboratory is required. PREREQUISITE: PHY201.

PHY213 – General Physics with Calculus I - (4 cr. hrs.)

This course is the first course in a two-part sequence of the calculus-based study of classical physics. Topics include kinematics, Newtonian Mechanics, the conservation of momentum and energy, and thermodynamics. Laboratory is required. PREREQUISITE: MTH125 and/or as required by program.

PHY214 – General Physics with Calculus II - (4 cr. hrs.)

This course is the second course in a two-part sequence of the calculus-based study of classical physics. Topics include electromagnetism, light, and optics. 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: As required by program.

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: As required by program.

PSY210 – Human Growth and Development - (3 cr. hrs.)

This course is a 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: 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 the religions of Africa, the Orient, and the western world. The student should have an understanding of the history and origins of the various religions in the world. PREREQUISITE: As required by program.

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: As required by program.

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: As required by program.

Sociology (SOC)

SOC200 – Introduction to Sociology - (3 cr. hrs.)

This course is an introduction to the vocabulary, concepts, and theoretical perspectives of sociology. PREREQUISITE: None

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: As required by program.

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. Attendance at theater production may be required. PREREQUISITE: As required by program.

THR126 - Introduction to Theater - (3 cr. hrs.)

This course is an introduction to the elements of the theatre, the principles of drama, and the development of theatrical productions. PREREQUISITE: As required by program.

Health Sciences T – Theory; L – Lab, C – Clinical

Medical Assisting (MAT)

MAT102 – Medical Assisting Theory I T3/L0/C0 Total 3 Semester Hours

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 T3/L0/C0 Total 3 Semester Hours

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 - T2/L1/C0 Total 3 Semester Hours

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 T2/L1/C0 Total 3 Semester Hours

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 T2/L1/C0 Total 3 Semester Hours

This course introduces medical office administrative procedures not covered in Medical Administrative Procedures. Topics include fees, credit, and collections, banking, bookkeeping, payroll, and computerized finance applications. Upon completion students should be able to manage the financial aspects of medical offices. PREREQUISITE: As required by program.

MAT125 – Lab Procedures I for the Medical Assistant T2/L1/C0 Total 3 Semester Hours

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 - T2/L0/C0 Total 2 Semester Hours

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 - T2/L1/C0 Total 3 Semester Hours

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 - T2/L1/C0 Total 3 Semester Hours

This course instructs the student in 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 T3/L1/C0 Total 4 Semester Hours 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 T2/L1/C0 Total 3 Semester Hours

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 T1/L0/C0 Total 1 Semester Hours

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 T1 L0 C0 Total 1 Semester Hours

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 the national credentialing examination. PREREQUISITE: As required by program.

MAT229 – Medical Assistant Practicum T0/L0/C3 Total 3 Semester Hours

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 T0/L0/C3 Total 3 Semester Hours

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 T4/L2/C1 Total 7 Semester 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 T4/L1/C3 Total 8 Semester 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 T5/L0/C3 Total 8 Semester 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 T1/L0/C1 Total 2 Semester 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. COREQUISITIES: NUR114, SPH106 or SPH107.

NUR209 – Concepts for Healthcare Transition Students T6/L1/C3 Total 10 Semester Credit Hours

This course focuses on the 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.

PREREQUISITES: MTH100 or higher-level Math, ENG101 English Composition I, BIO201 and BIO202 Human Anatomy & Physiology I & II, PSY210 Human Growth and Development, SPH107 Oral Communication.

NUR211 Advanced Nursing Concepts T4/L0/C3 Total 7 Semester 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.

COREQUISITE: BIO220

NUR221 Advanced Evidence Based Clinical Reasoning T3/L0/C4 Total 7 Semester 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. COREQUISITE: Humanities elective.

Patient Care Technician (PCT), Nursing Assistant (NAS), Mental Health Technician (MHT)**HPS103 Foundation Competencies for Health Sciences T3/L0/C0 Total Semester Credit Hours - 3**

This course is designed to assist the student in developing the knowledge, skills, and abilities necessary to be successful in health-related disciplines. Content focuses on development and use of effective study and test-taking skills, assertiveness training, stress management, values clarification, diversity, ethical-legal concepts, problem-solving and communication skills. Upon completion of this course, the student will demonstrate the knowledge, skills and abilities needed to be successful in the student role.

HPS112 Medical Terminology for Healthcare T3/L0/C0 Total Semester Credit Hours – 3

This course is an introduction to medical terminology used in health sciences. Emphasis is placed on terminology associated with health care, spelling, pronunciation, and meaning associated with prefixes, suffixes, and roots as they relate to anatomical body systems. Upon completion of this course, the student should be able to correctly abbreviate medical terms and appropriately use medical terminology in verbal and written communication.

HPS114 Basic Pharmacology T2/L0/C0 Total Semester Credit Hours - 2

This course is an introduction to basic pharmacology. Content includes classifications, indications, contraindications, desired effects, and side effects of medications used during diagnostic procedures and the prevention and treatment of common illnesses. Upon completion of the course, the student should be able to relate basic pharmacological concepts to the maintenance of health.

NAS100 Long-Term Care Nursing Assistant T3/L0/C1 Total 4 Semester Credit Hours

This course fulfills the seventy-five (75) hour Omnibus Budget Reconciliation Act (OBRA) requirements for training of long-term care nursing assistants in preparation for certification through competency evaluation. Emphasis is placed on the development of the knowledge, attitudes, and skills required of the long-term care nursing assistant. Upon completion of this course, the student should demonstrate satisfactory performance in written examinations and clinical skills.

NAS/HHA102 Medication Assistant T4/L1/C1 Total Semester Credit Hours – 6

This course fulfills the National Council of State Boards of Nursing (NCSBN) one hundred (100) hour Medication Assistant Certified (MA-C) Curriculum requirements for training of nursing assistants in preparation for medication assistant certification (MA-C) through competency evaluation. Emphasis is placed on the development of the knowledge, attitudes, and skills required of the medication assistant. Upon completion of this course, the student should demonstrate satisfactory performance on written examinations, practical lab, and clinical skills. Completion of this course is satisfactory for candidacy for the Medication Assistant Certification Exam (MACE) through NCSBN.

NAS111 Fundamentals of Long-Term Care T4/L2/C0 Total 6 Semester Credit Hours

This course provides students with the necessary theory and laboratory experiences for the development of skills required to qualify as a long-term care Nursing Assistant. Emphasis is placed on the acquisition of skills in communication, observation, safety, mobility/body mechanics, personal and restorative care, and infection control necessary to care for patients and clients of all ages. Upon completion of this course, students will be able to apply concepts and skills in areas required by the Omnibus budget Reconciliation Act (OBRA).

NAS112 Fundamentals of Long-Term Care Clinicals T0/L0/C2 Total 2 Semester Credit Hours

This course is designed for students to apply knowledge and skills needed to perform basic nursing care safely and efficiently in various supervised health care settings. Emphasis is placed on safety, therapeutic communication, infection control, critical thinking, and proper documentation. Upon completion of the course, students will demonstrate beginning competency in delivery of care to patients and clients in various health care settings.

NAS115 CPR & Basic First Aid T1/L1/C0 Total 2 Semester Credit Hours

This course is designed to help the student feel more confident and act appropriately in an emergency situation. Emphasis is placed on providing the student with theoretical concepts to develop skills in basic first aid and cardiopulmonary resuscitation. Upon successful course completion, which includes specific competencies in basic life support the student will receive appropriate course completion documentation.

NAS/HHA120 Fundamentals of Nursing Assistant/Home Health Aide T5/L2/C0 Total 7 Semester Credit Hours

PREREQUISITE: NA

COREQUISITE: NA or NAS 121 – Fundamentals of Nursing Assistant/Home Health Aide Clinical

This course provides the student with the necessary theory and laboratory experiences for the development of skills required to qualify as a long-term care Nursing Assistant/Home Health Aide. Emphasis is placed on the acquisition of skills in communication, observation, safety, mobility/body mechanics, personal and restorative care, and infection control necessary to care for patients and clients of all ages. Upon completion of this course, the student will be able to apply concepts and

skills in areas required by the Omnibus Budget Reconciliation Act (OBRA) and the National Association of Home Care.

NAS/HHA121 Fundamentals of Nursing Assistant/Home Health Aide T0/L0/C3 Total 7 Semester Credit Hours

PREREQUISITE: NA

COREQUISITE: NAS 120 – Fundamentals of Nursing Assistant/Home Health Aide

This course is designed for students to apply knowledge and skills needed to perform basic nursing care safely and efficiently in various supervised health care settings. Emphasis is placed on safety, therapeutic communication, infection control, critical thinking, and proper documentation. Upon completion of this course, the student will demonstrate beginning competency in the delivery of care to patients and clients in various health care settings.

Cabinet and Faculty

President's Cabinet

President

Dean of Students

Dean of Instruction

Director of Grants/ Sponsored Programs

Director of Public Relations

Director of Workforce Development

Executive Director of Fiscal Affairs and Administrative Services

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: Kelly Williams, Bertha Little

Cosmetology/Barbering/Esthetics/Nail Care

Natural Hair/Cosmetology Instructor Training (CIT)

Business, Computer Science and Engineering Technologies

Accounting Technology (ACT): Gladys Ayokanmbi

Computer Information Systems Technology (CIS): Ronald Muhammad, Kacey Taylor

General and Developmental Education

Biology (BIO): Eunice Wheeler, William Smith

Humanities (HUM)/(REL)/(PHL): Russell Winn

Developmental English (ENG)/Composition and Literature: Ed Forbes, Russell Winn

Developmental Math/Mathematics (MTH): Brandi Winchester

Health Sciences Technologies

Medical Assisting Technology (MAT): Lauren Burruss

Nursing (NUR): Mattie Davis, Mukesha Mbuguje, Tina Ennis, Bonnie Bibb, Courtney McClafin, Stephanie McLaughlin

Faculty Degrees and Credentials

Last Name, First Name	Department	Degree or Years in Lieu of Experience	Institution	Licenses & Certifications
Ayokanmbi, Gladys	Accounting Instructor	Masters	Alabama A&M University	Certified Accountant
Bevel, Joseph	Welding Instructor	Associates	Northeast Alabama Community College	OSHA Authorized Outreach Trainer, NCCER Craft Instructor, AWS CWI Certified Welding Inspector, and AWS CWE Certified Welding Educator
Bibb, Bonnie	Nursing	Doctorate	University of Alabama in Birmingham	RN, BLS
Borden, Dennis	Assistant Director of Library Services	Masters	University of Alabama	
Burruss, Lauren	Medical Assisting Technology Instructor	Masters	Jacksonville State University	Registered Medical Assistant (RMA), Pediatric Nutrition Assessment Certificate, BLS, Jurex Professional Legal Nurse Consultant Certification, Emergency Preparedness Nurse Coordinator graduate certification
Clark, Tammie	Advanced Manufacturing Engineering Design Instructor	Bachelors	Athens State	Bachelors of Management of Technology w/minor Information Systems Management NC3 Precision Measurement Certified Instructor SolidEdge Certified Associate II NOCTI Teacher Assessment - Technical Drafting
Clift, Carla	Director of Library Services	Masters	University of Alabama	Library Information Technology Certification
Davis, Mattie	Nursing Instructor	Doctorate	University of Alabama in Birmingham	American Nurses Credentialing Center Certification for Nurse Practitioners, RN, BCLS, ACLS

Ellis, Brett John	Advanced Manufacturing Engineering Design Instructor	Associates	J.F. Drake State Community and Technical College	
Ennis, Tina	Health Sciences	MSN, with Emphasis in Nursing Ed.	Grand Canyon University 2014	RN
Forbes, Edwin	English Instructor	Masters	University of Alabama in Huntsville	
Fury, Lilia	Adult Education Instructor	Masters	Northern University of Arizona	
Goodloe, Lardell	Electrical Instructor	Masters	Athens State University	Certification for Electrical Contractors Examination and Requirements (Master Electrician), Electricity Journeyman Wireman-IBEW, Electrical Journeyman (UAW), Certificate of Completion of Apprenticeship, Certificate of Completion for Universal Technician, Certified Fiber Optic Technician, State of Alabama Electrical Contractors Examination and Requirements, Electrical Contractor License, Certified Production Technician (CPT) Safety Instructor, 30 years working in industry
Henry, Casey	HVAC Instructor	Bachelors	Alabama A&M University	Certified in Rinnai Water Heater, Fujitsu Mini Split, Mitsubishi Electric Mini Split/City Multi, Gas TI, Tract Pipe, GastiteMasters – Molecular Biology & Physiology Price, Trane Tracer Users Group, Tracer ES, Proctor, Installer for Gastite-Flash Shield Flexible Gas Piping Certification, TYPE I-TYPE 2 Technician, Apprentice Plumber Gas Fitter Certificate of Competency, 24 year working in industry
Little, Bertha	Salon Management-Cosmetology Instructor	Masters	Florida Institution of Technology	Cosmetology Instructor’s License, 15 years Salon Business Owner
Mbuguje, Mukesha	Nursing Instructor	Doctorate	Capella University	Registered Nurse, BLS

McClafflin, Courtney	Nursing	Masters	University of North Alabama	RN, BLS, ACLS
McLaughlin, Stephanie	Nursing	Masters	University of North Alabama	RN, BLS, PALS Instructor
Muhammad, Ronald	CIS Instructor	Masters	University of Detroit Mercy	Certification Level One in Arabic Language, Certified as Information Auditor by the National Security Administration (NSA)
Rafferty, Kory	Welding Instructor	Associates; Bachelors	J.F. Drake State Community and Technical College; Athens State	OSHA Authorized Outreach Trainer, NCCER Craft Instructor, and AWS CWI Certified Welding Inspector
Smith, William	Biology	Bachelors; M.S. Biology; Masters Education	Alabama A&M	
Swaim, Richard Mark	Automotive Instructor	Experience in lieu of degree		Technical Training Certificate, ASE Certified, Isuzu Service Training Certificate in Impulse Automatic, Air Condition, 5-Speed Manual, Fuel Injection Systems, Total Wheel Service-TWSI; Electrical Core, ASE-Master Automobile Technician, Medium/Heavy Truck Technician, 32 years working in industry
Taylor, Kacey	CIS	Bachelor of Business Administration, 2007 Master of Business Administration 2020	Both are from The University of North Alabama	
Wheeler, Eunice	Biology	Masters – Molecular Biology & Physiology	Alabama A&M University	
Williams, Jeffrey Tyler	Advanced Manufacturing Machine Tool Technology Instructor	Associates	Northeast Alabama Community College	Machine Tool Technology Short Certificate, 10 years working in industry
Williams, Kelly	Cosmetology Instructor	Bachelors	Virginia College	Cosmetology Instructor License, Microsoft Office Certification

Winchester, Brandi	Mathematics Instructor	Masters	Alabama A&M University	
Winn, George Russell	Humanities Instructor	Masters	Louisville Seminary	Bachelor of Arts in English from Georgia Southern University