

J.F. INGRAM STATE TECHNICAL COLLEGE
COLLEGE CATALOG

2023-2024

**DEVELOPING
RESPONSIBLE
CITIZENS**



J.F. Ingram State Technical College
5375 Ingram Road
Deatsville, AL 36022

From the President



Welcome to the start of an exciting time at J.F. Ingram State Technical College!

In 2022, the Alabama Community College Board of Trustees tasked the Ingram team with delivering adult education and career technical training to incarcerated students statewide. In partnership with the Alabama Department of Corrections and the Alabama Bureau of Pardons and Paroles, we are serving students in 30 locations across Alabama.

At Ingram State, students learn the skills necessary to succeed in the workplace, which reduces the likelihood of recidivism. A 2021 economic impact study by Lightcast reported for every dollar of public money invested in ISTC, taxpayers will receive \$1.70 in return, over the course of students' working lives. The average annual rate of return for taxpayers is 3.5%

Our vision is to lead the nation in providing quality correctional educational programs, promoting activities to reduce recidivism, increasing public safety, and sustaining fiscal accountability for the citizenry of Alabama.

If you would like to learn more about J.F. Ingram State Technical College and how our graduates are making a difference in the workplace, contact us at www.istc.edu.

A handwritten signature in black ink that reads "Annette Funderburk". The script is fluid and cursive, with the first name being more prominent.

Annette Funderburk
President

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2023-2024 ACADEMIC CALENDAR

Fall 2023 Semester

August 15 & 16	Faculty/Staff Duty Day (No Classes)/Local Professional Development
August 17	Registration
August 18	Classes Begin
August 25	Last Day Drop/Add
August 30 & 31	Commencement Ceremony
September 4	Holiday (Labor Day – College Closed)
October 12	Mid Term
October 13	Mid Term Grades Due; Mini Term Begins
November 10	Holiday (Veterans Day – College Closed)
November 20 & 21	State Professional Development
November 22	Faculty Non-Duty Days, Duty for Staff (No Classes)
November 23 & 24	Holiday (Thanksgiving – College Closed)
December 11, 12, & 13	Exams
December 14	Classes End
December 15	Grades Due and Local Professional Development
December 18, 19, 20, & 21	Faculty Non-Duty Days, Duty for Staff (No Classes)
December 25	Holiday (Christmas Day – College Closed)
December 22, 26-30	Local Holidays
December 23 – January 1	College Closed

Spring 2024 Semester

January 2	Faculty Non-Duty Days, Duty for Staff (No Classes)
January 3	Registration
January 4	Classes Begin
January 11	Last Day Drop/Add
January 15	Holiday (Robert E. Lee/Martin Luther King – College Closed)
February 19	Faculty/Staff Duty Day (No Classes)/Local Professional Development
February 29	Mid Term
March 1	Mid Term Grades Due; Mini Term Begins
March 25-29	Faculty Non-Duty Days, Duty for Staff (Spring Break)
April 22	Faculty/Staff Duty Day (No Classes)
April 29, 30 and May 1	Exams
May 2	Classes End and Grades Due

Summer 2024 Semester

May 3 & 6	Commencement Ceremony/ Faculty/Staff Duty Day (No Classes)
May 7	Registration
May 8	Classes Begin
May 15	Last Day Drop/Add
May 27	Holiday (Memorial Day – College Closed)
June 3	Faculty/Staff Duty Day (No Classes)/
June 19	Holiday (Juneteenth – College Closed)
June 21	Mid Term
June 24	Mid Term Grades Due
July 4	Holiday (Independence Day – College Closed)
July 31 and August 1 & 2	Exams
August 5	Classes End and Grades Due
August 6-9, and 12	Faculty Non-Duty Days, Duty for Staff (No Classes)

J.F. Ingram State Technical College (ISTC) was established by the Alabama legislature in 1965 for the express purpose of providing training to incarcerated individuals. The College delivers career technical education, GED preparation and testing, and job placement services to incarcerated students from seven correctional facilities and the Alabama Therapeutic Education facility; and to parolees at L.I.F.E. Tech Transition Center.

ISTC is a member of the Alabama Community College System, under the control of the Alabama Community College System Board of Trustees. The Governor serves as chair of the Board by virtue of elected office. Other board members are appointed from seven districts, with one state-wide member and an ex-officio liaison from the State Board of Education. ISTC's president is appointed by the Chancellor and approved by the board. ISTC is accredited by the Council on Occupational Education (COE). The Council is located at 7840 Roswell Road, Building 300, Suite 325, Atlanta, GA 30350.

Alabama Community College System Board of Trustees

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Our Mission

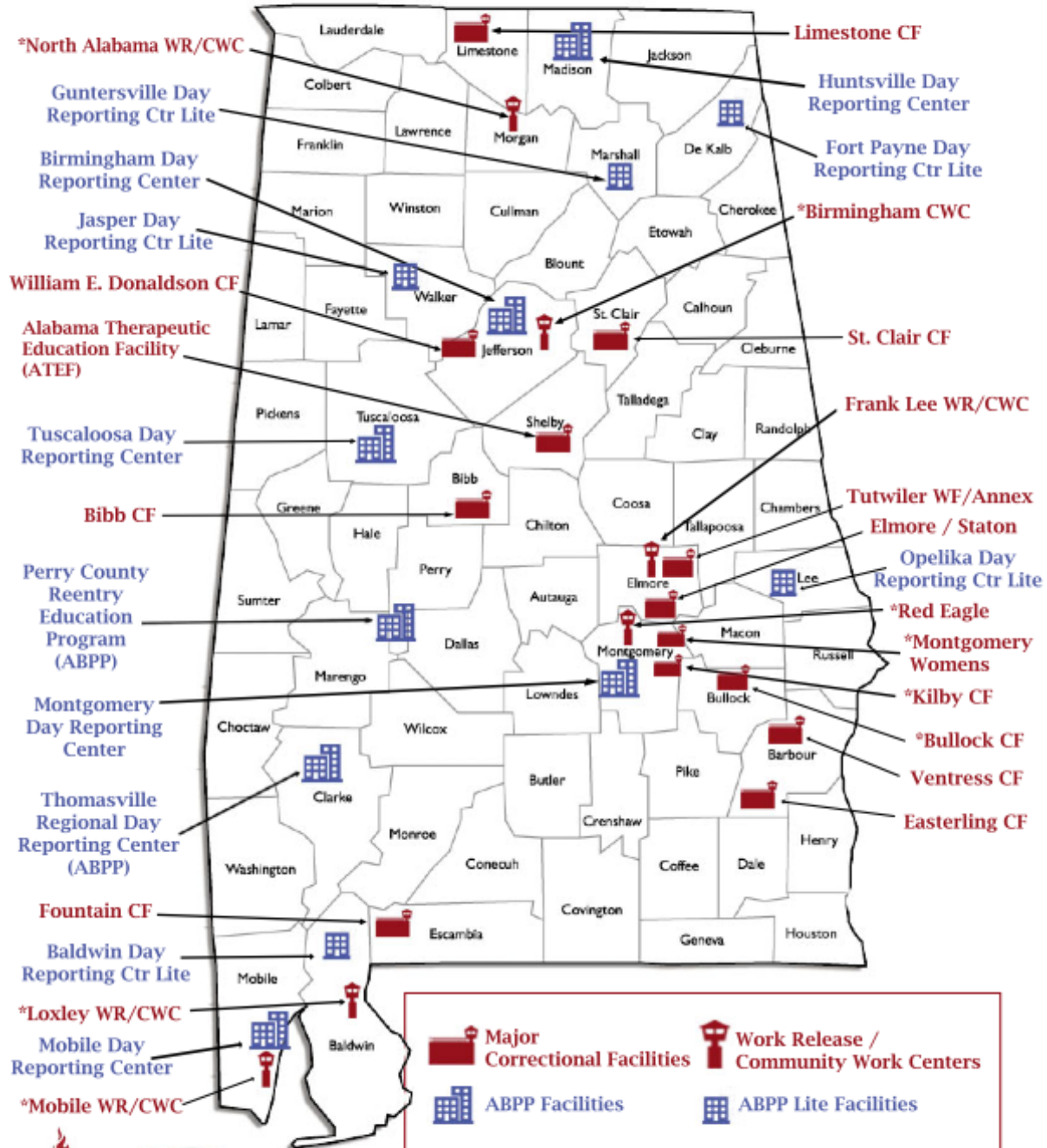
J.F. Ingram State Technical College provides comprehensive educational services to incarcerated adults to reduce recidivism and return responsible citizens to society.

Our Vision

The vision of J.F. Ingram State Technical College is to be a national leader in correctional education, by promoting actions to reduce recidivism, increasing public safety and sustaining fiscal accountability for the citizenry of Alabama.

J.F. Ingram State Technical College

Map of Correctional Educational Services



February 2023

SERVICE LOCATIONS

Main Campus
5375 Ingram Road
Deatsville, AL 36022

Draper Instructional Service Ctr
2800 Highway 143
Elmore, AL 36025

Tutwiler Instructional Service
Ctr
8970 US Highway 231 North
Wetumpka, AL 36092

Bibb Correctional Facility
565 Bibb Lane
Brent, AL 35034

Bullock Correctional Facility
Highway 82 East
Union Springs, AL 36089

Alabama Therapeutic Education
Facility
102 Industrial Parkway
Columbiana, AL 35051

Donaldson Correctional Facility
100 Warrior Lane
Bessemer, AL 35023

Easterling Correctional Facility
200 Wallace Drive
Clio, AL 36017

Fountain Correctional Facility
9677 Highway 21 North
Atmore, AL 36503

Kilby Correctional Facility
12201 Edna Brake Lucas Drive
Montgomery, AL 36117

Limestone Correctional Facility
28779 Nick Davis Road
Harvest, AL 35749

St. Clair Correctional Facility
1000 St. Clair Road
Springville, AL 35146

Ventress Correctional Facility
Highway 239 North
Clayton, AL 35146

Birmingham Community-based
Facility
1216 25th Street North
Birmingham, AL 35234

Loxley Community-based
Facility / Community Work
Center
14880 County Road 64
Loxley, AL 36551

North Alabama Community-
based Facility / Community
Work Center
1401 Highway 20 West
Decatur, AL 35601

Red Eagle Community Work
Center
1290 Red Eagle Road
Montgomery, AL 36110

Montgomery Women's Facility
12085 Wares Ferry Road
Montgomery, AL 36117

Birmingham Day Reporting
Center
2020 12th Avenue North
Birmingham, AL 35234

Huntsville Day Reporting Center
2801 Westcorp Blvd. SW
Huntsville, AL 35805

Mobile Day Reporting Center
3410 Demetropolis Road
Mobile, AL 36693

Montgomery Day Reporting Ctr
231 Clayton Street
Montgomery, AL 36104

Thomasville Day Reporting
Center
2117 Bash Road
Thomasville, AL 36784

Tuscaloosa Day Reporting
Center
220 14th Street, Unit 150
Tuscaloosa, AL 35401

Baldwin Day Reporting Ctr Lite
209 Rain Drive
Bay Minette, AL 36507

Fort Payne Day Reporting
Center Lite
211 Gault Avenue South
Fort Payne, AL 35967

Guntersville Day Reporting
Center Lite
310 Carlisle Street
Albertville, AL 35950

Jasper Day Reporting Ctr Lite
2209 Delaware Avenue
Jasper, AL 35501

Opelika Day Reporting Ctr Lite
2213 Center Hill Road
Opelika, AL 36807

Perry County Correctional
Center
4805 Highway 80
Uniontown, AL 36786

Nondiscrimination Policy Statement

In accordance with the official policy of the Alabama Community College System, the Alabama Community College System Board of Trustees, and all other applicable federal regulations, J. F. Ingram State Technical College (ISTC) is committed to equal opportunity in employment and education. No person in Alabama shall, on the grounds of race, color, handicap, gender, religion, creed, national origin, or age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program, activity, or employment or any other protected status.

It is the policy of ISTC to comply fully with all applicable provisions of Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973, as amended; Title IX of the Education Amendments of 1972, as amended; the Age Discrimination Act of 1975, as amended; and all regulations, guidelines, and standards lawfully adopted under the statutes. These statutes prohibit discrimination based on race, color, national origin, handicap, gender, or age.

Any student or employee or specific class of persons who believe themselves to have been subjected to discrimination prohibited by any of these statutes may, in person or by personal representative, file a written complaint with ISTC's institutional compliance officer: Coordinator of Human Resources, J. F. Ingram State Technical College, 5375 Ingram Road, Post Office Box 220350, Deatsville, AL 36022.

Correctional Education Policy Statement

As stated in the above non-discrimination policy (equal opportunity/equal access), decisions about student participation in programs or courses at J. F. Ingram State Technical College are made without regard to the applicant's race, color, disability, gender, religion, creed, national origin, or age.

ISTC operates under ACCS Board of Trustees Policy 718.01, and 16-3-20 and 16-60-170 Code of Alabama, 1975, as amended).

Safety Procedures

The practice of safety is an integral part of all instruction at ISTC. The school has a comprehensive safety plan and operations manual, which is evaluated and updated annually. Each office also houses a copy of the ISTC Emergency Preparedness manual.

Standards of Conduct

During the registration process, students read and attest to their understanding of the student regulations and conduct code as they appear in the student handbook. Violation of any part of the student conduct code can result in dismissal.

Drug-Free Workplace Policy

In compliance with the drug-free workplace requirements of Public Law 100-690 for recipients of federal contracts and grants, and ACCS Board of Trustees action item No. XI-1 of March 30, 1989, ISTC has established a comprehensive controlled substance policy. ISTC Policy 613.01 details the responsibilities of all employees and the administrative procedures that will be followed should the policy be violated.

Privacy of Student Records Policy

In accordance with Public Law 93-380, the Family Educational Rights and Privacy Act of 1974, all students and former students of ISTC have the right to inspect their official educational records in the Director of Student Services office. This act limits the release of information by the College concerning a student without that student's written permission.

Sexual Harassment Policy

Sexual harassment is a form of discrimination that violates Section 703 of Title VII of the Civil Rights Act of 1964, as amended. ISTC Policy 601.04 states that it is the policy of the college to maintain a working and learning environment that is free of sexual harassment. Anyone who wishes to obtain a copy of this policy or believes that he or she has been sexually harassed and wishes to file a complaint, should contact the college's institutional compliance officer: Coordinator of Human Resources, J. F. Ingram State Technical College, Post Office Box 220350, Deatsville, AL 36022.

Grievance Procedures

A grievance is an alleged violation, misunderstanding, or misinterpretation of school policy by any member of the professional staff, nonprofessional staff, or student body. Students are guaranteed procedural rights and substantial due process in all cases involving formal discipline charges. This also includes academic dismissal cases. Students who believe they have a grievance and wish to pursue the resolution of that grievance should first contact the Dean of Students. Student Support Services personnel will be assigned to explain the procedures and implement any proceedings.

Any employee who believes that he or she has a grievance should first contact the Coordinator of Human Resources. The purpose of any grievance procedure is to settle equitably, at the lowest possible administrative level, differences and issues related to the school policy. This procedure does not apply to alleged discrimination relating to race, gender, disability, or other federally legislated civil rights. The proceedings will be kept as informal as possible, while retaining confidentiality at all levels of the procedure.

Attendance Policy

J. F. Ingram State Technical College adheres to ACCS BOT Policy 809.01, Chancellor's Procedures for Policy 809.01 and ISTC policy 809.01 regarding student attendance.

Students are expected to attend class regularly. Discretion will be used by instructors and the Dean of Students regarding absences beyond the student's control; however, students are strongly advised to attend regularly. Any problems with attendance should be directed to the proper College official.

Live-Work Policy

It is the philosophy of ISTC, that live work is a valuable part of career technical college instructional programs. This live work is done by students in the laboratory component of their curriculum. Instructors assign live work to students only when they are ready to perform or practice the skill involved at the appropriate point in the student's program of study.

All live work is conducted in accordance with ACCS Board of Trustees Policy 710.01, Chancellor's Procedures for Policy 710.01 and ISTC Policy 710.01.

Americans with Disabilities Act

It is the policy and practice of ISTC to comply fully with the Americans with Disabilities Act of 1990 and to ensure equal opportunity in education and employment for all qualified persons with disabilities. The College will make every reasonable attempt to provide accommodations to students and employees with disabilities. It is the responsibility of the student or employee to notify the College of any special needs. If a disability exists which requires special materials or services, this must be made known to the Coordinator of Human Resources so that adequate accommodations can be made.

ADMISSIONS

J.F. Ingram State Technical College has an open admission policy for incarcerated and formerly incarcerated men and women housed in facilities it serves. The College admits eligible applicants on an ongoing basis, and students may enroll in courses up to the last day to add a course for that particular semester. Admission decisions will be made without regard to the applicant's race, color, disability, sex, religion creed, national origin, sexual orientation, or age.

Admission Requirements

Certificate Programs

1. Applicant must be at least 16 years of age
2. Recommendation by correctional facility job board
3. Completed and signed ISTC admission application
4. Required score on the ACCUPLACER or Test of Adult Basic Education (TABE)
5. Although a high school diploma or General Education Development diploma (GED) is preferred, non-graduates may be enrolled in some career technical courses under the Ability to Benefit Criteria
6. One (1) primary form of identification.

Admission by Ability to Benefit

All students seeking admission under this section must be assessed using the state approved ACCUPLACER and/or Test of Adult Basic Education (TABE) assessment. This test is given to assess academic levels in reading, language, and math. Students who do not meet the required entrance level scores are referred to the Adult Education/GED program.

Students enrolled in Adult Education are closely monitored for successful academic progress. Students are tested periodically to determine their ability to benefit from enrollment in career technical programs. The ability to benefit is determined by an increase in the academic level of performance and by AE instructor advisement.

Readmission of Prior Students

Students who have been out of school for one (1) semester or more must meet the current requirements for entry into career technical programs.

2023-2024 Tuition/Fee Rates

August 18, 2023 – August 5, 2024

Cr. Hrs.	Tuition*	Tech. Fee	Facilities Renewal Fee	Bond Res. Fee	Supplies Fee	All Fees	Total
1	\$137	\$9	\$9	\$1	\$17	\$36	\$173
2	\$274	\$18	\$18	\$2	\$34	\$72	\$346
3	\$411	\$27	\$27	\$3	\$51	\$108	\$519
4	\$548	\$36	\$36	\$4	\$68	\$144	\$692
5	\$685	\$45	\$45	\$5	\$85	\$180	\$865
6	\$822	\$54	\$54	\$6	\$102	\$216	\$1,038
7	\$959	\$63	\$63	\$7	\$119	\$252	\$1,211
8	\$1,096	\$72	\$72	\$8	\$136	\$288	\$1,384
9	\$1,233	\$81	\$81	\$9	\$153	\$324	\$1,557
10	\$1,370	\$90	\$90	\$10	\$170	\$360	\$1,730
11	\$1,507	\$99	\$99	\$11	\$187	\$396	\$1,903
12	\$1,644	\$108	\$108	\$12	\$204	\$432	\$2,076
13	\$1,781	\$117	\$117	\$13	\$221	\$468	\$2,249
14	\$1,918	\$126	\$126	\$14	\$238	\$504	\$2,422
15	\$2,055	\$135	\$135	\$15	\$255	\$540	\$2,595
16	\$2,192	\$144	\$144	\$16	\$272	\$576	\$2,768
17	\$2,329	\$153	\$153	\$17	\$289	\$612	\$2,941
18	\$2,466	\$162	\$162	\$18	\$306	\$648	\$3,114
19	\$2,603	\$171	\$171	\$19	\$323	\$684	\$3,287
20	\$2,740	\$180	\$180	\$20	\$340	\$720	\$3,460
21	\$2,877	\$189	\$189	\$21	\$357	\$756	\$3,633

Note: Some programs and /or classes may require additional fees. \$5.00 of each tuition credit hour will be transferred to the ACCS System Office.

***Includes \$10/credit hour ACCS Enhancement Fee**

Official School Catalog Addendum - J.F. Ingram State Technical College

I certify the current policy is true and correct:

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

- A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill -Active-Duty Program) or chapter 33 (Post-9/11 G.I. Bill), of title 38, United States Code, who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge or release from a period of active duty service of 90 days or more.
- Anyone using transferred post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor's discharge or release from a period of active-duty service of 90 days or more.
- Anyone described above remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three-year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence).
- Anyone using transferred post-9/11 G.I. Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.
- The policy shall be read to be amended as necessary to be compliant with the requirements of 38 U.S.C. 3679 as amended.

February 2, 2017

Date



Signature of individual authorized to make official revisions to the catalog

Interim President

Title

Official School Catalog Addendum - Terms Beginning after 3/1/2019 (PL 115-251 Sec. 301)

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

- A Veteran using educational assistance under either chapter 30 (Montgomery G.I. Bill -Active-Duty Program) or chapter 33 (Post-9111 G.I. Bill), of title 38, United States Code, who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge or release from a period of active-duty service of 90 days or more.
- Anyone using transferred post-9/11 GI Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence) and enrolls in the school within three years of the transfer, discharge, or release from a period of active-duty service of 90 days or more.
- Anyone described above remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three-year period following discharge or release as described above and must be using educational benefits under either chapter 30 or chapter 33, of title 38, United States Code.
- Anyone using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal State of residence).
- Anyone using transferred Post-9/11 G.I. Bill benefits (38 U.S.C. § 3319) who lives in Alabama while attending a school located in Alabama (regardless of his/her formal state of residence) and the transferor is a member of the uniformed service who is serving on active duty.
- Anyone using educational assistance under chapter 31, Vocational Rehabilitation/Employment (VR&E), also be charged the resident rate. Effective for courses and terms beginning after March 1, 2019, a public institution of higher learning must charge the resident rate to chapter 31 participants, as well as the other categories of individuals described above. When an institution charges these individuals more than the rate for resident students, VA is required to disapprove programs of education sponsored by VA.
- The policy shall be read to be amended as necessary to be compliant with the requirements of 38 U.S.C. 3679(c) as amended.

I certify the above current policy is true and correct:

J.F. Ingram State Technical College

Name of School

December 12, 2018

Date


Signature/Title

President

of individual authorized to make official revisions to the catalog

Tuition and Fees

Tuition, fees and special costs are waived for only one program completion per student. Students who are required to pay tuition must have the financial status of CLEAR no later than seven (7) days after drop and add. If the status of the student is not CLEAR, the student will be withdrawn. If a student enrolls in a second program, the following tuition, fees, and refund policy will apply.

Refund of tuition will be made according to the following for students who withdraw:

Before the first day of class	100 %
During the first week of class	75 %
During the second week of class	50 %
During the third week of class	25 %

An administrative fee not to exceed five (5) percent of tuition and other institutional charges or \$100, whichever is smaller, shall be assessed for each withdrawal within the period beginning the first day of class and ending at the third.

Refunds

1. Withdrawal from the College

To withdraw from the College, a student should secure a withdrawal form from the Dean of Students' office and complete and return the form. A refund of tuition applies to students who completely withdraw from the College during the refund period and so notify the Dean of Students' office in writing of their withdrawal. The date to establish refund will be determined by the date withdrawal is initiated and acknowledged (documented) by an appropriate college official. Any financial obligation to the College is deducted from any refund due.

a) Refunds for fall and spring terms:

Prior to first day of class	100%
First Week*	75%
Second Week	50%
Third Week	25%

*(beginning the same day as late registration fee applies)

b) Refund for Summer Term

Specific dates are in the term schedule. Each refund period is approximately three days during summer term.

2. Reduction in Credit Hours

Students who reduce their credit hours during the drop/add period will receive at mid-term a tuition adjustment at the applicable rate. After the end of the drop/add period, students who reduce their credit hours without withdrawing from the College will receive no tuition refund.

Guidance and Counseling

Initial orientation is provided to all students upon their enrollment in the college. Counseling by student services personnel in educational, vocational, and personal matters is available to all students.

Repetition of Courses

A student may not repeat for credit any course in which the grade received was A, B, or C, excluding courses which may be repeated for credit as allowed in the course directory. When a student repeats a course in which a D or an F was earned, the original grade (GPA) and the repeated grade will be entered on the student's original transcript. The cumulative grade point average will be determined from all quality points and attempted hours that have been accrued; however, only the last grade awarded will be included in calculating the GPA for graduation purposes. In the case of developmental courses, students who receive either a grade of U or IP for two semesters may not enroll in that course for a third semester until

they receive special academic advising. This advising may include requiring a study skill course or other actions considered appropriate by the student's educational planning committee.

Grading System

Cumulative Grade Point Average (GPA): The grade point average is based on all hours attempted at the institution on a 4-point scale as follows:

A-Excellent:	(91 - 100)	4 Quality Points
B-Good:	(81 - 90)	3 Quality Points
C-Average:	(71 - 80)	2 Quality Points
D-Poor:	(61 - 70)	1 Quality Point
F-Failure:	(60 or less)	0 Quality Points

No Quality Points are awarded for the designations listed below:

I-Incomplete: Must be made up no later than the end of the following semester or the grade of "F" will be assigned. 0-points.

AU-Audit: Course taken for no credit. Must be declared prior to the end of the registration period and may not be changed thereafter. 0-points.

W-Withdrawal: Credit hours will not be averaged into the GPA. 0-points.

S-Satisfactory: For developmental courses. Credit hours will not be averaged into the GPA.

U-Unsatisfactory: For developmental courses, credit hours will not be averaged into the GPA.

IP-In Progress: For developmental courses, credit hours will not be averaged into the GPA.

Note: Any credit awarded based on a competency exam, or as transfer credit accepted from coursework accomplished at another institution, will be designated as such by the college. All applicable academic designations above will appear on the student's transcript.

General Principles for Transfer Credit

A course completed at other regionally accredited post-secondary institutions with a passing grade will be accepted for transfer as potentially creditable toward graduation requirements. For students admitted on academic probation, only courses in which they have earned a course grade of "C" or better will be accepted for transfer. Awarding transfer credit to fulfill graduation requirements will be based on applicability of the credits to the requirements of the degree sought. Credit may be extended based on the comprehensive evaluation of demonstrated and documented competencies and previous formal training.

Note: Transfer credits that are five years old or older will not be accepted.

Standards of Academic Progress

The Chancellor's procedures for ACCS Board of Trustees Policy No. 714.01 "Standard of Academic Progress" shall apply to all students unless otherwise noted.

1.1 Required GPA levels for students according to number of hours attempted at institution.

1.11 Students who have attempted 12-21 semester credit hours at the institution must maintain a 1.5 cumulative GPA.

1.12 Students who have attempted 22-32 semester credit hours at the institution must maintain 1.75 cumulative GPA.

1.13 Students who have attempted 33 or more semester credit hours at the institution must maintain a 2.0 cumulative GPA.

2.1 Intervention for student success.

2.11 When a student is placed on academic probation, one term academic suspension, or calendar year academic suspension, college officials may provide intervention for the student taking steps including, but not limited to, imposing maximum course loads, requiring a study course, and/or prescribing other specific courses.

3.1 Application of standards of progress.

3.11 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.

3.12 When students' cumulative GPA is below that required for the number of credit hours attempted at the institution, they are placed on academic probation. 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 2.0 or above, the student remains on academic probation. 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 2.0, 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.

3.13 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 who is readmitted upon appeal re-enters the institution on academic probation.

3.14 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 2.0, or above, will remain on academic probation until the student achieves the required GPA for the total number of hours attempted.

3.15 A student returning from a one-term or one-year suspension, and while on academic probation, fails to obtain the required GPA for the number of hours attempted, and fails to maintain a term GPA of 2.0, will be placed on a one-year suspension.

3.16 The student may appeal a one-term or one-year suspension.

3.17 The permanent student record will reflect the student's status (except when the status is clear). When appropriate, the record will reflect ACADEMIC PROBATION, ACADEMIC SUSPENSION-ONE TERM, ACADEMIC PROBATION-ONE YEAR, ONE-TERM SUSPENSION-READMITTED ON APPEAL, OR ONE-YEAR SUSPENSION-READMITTED ON APPEAL.

4.1 If a student declares no contest of the 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 a designated, published number of 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 should be the standards by which such decisions are measured.

5.1 Definition of Terms

Grade Point Average (GPA) – The GPA based on all hours attempted during any one term at the institution based on a 4-point scale.

Cumulative Grade Point Average (GPA) – The GPA based on all hours attempted at the institution based on a 4-point scale.

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

Academic Probation

(1) The status of a student whose cumulative GPA falls below the level required by this policy for the total number of credit hours attempted at the institution; or

(2) The status of a student who was on academic probation the previous term and whose cumulative GPA for that semester remained below the level required by this policy for the total number of credit hours attempted at the institution, but whose GPA for the term was 2.0 or above.

One Semester Academic Suspension – The status of a student who was on academic probation the previous term, but who has never been suspended or who, since suspension, had achieved clear academic status and, whose cumulative GPA that term was below the level required by this policy for the total number of credit hours attempted at the institution, and whose GPA for that term was below 2.0.

One Year Academic Suspension – The status of a student who was on academic probation the term and who had been previously suspended, without since having achieved clear academic status whose cumulative GPA that term, remained below the level required by this policy for the total required credit hours attempted at the institution, and whose semester GPA for that term was below 2.0.

Appeal of suspension - The process by which an institution shall allow a student suspended for one year (whether a “native” student or a transfer student) to request readmission without serving the suspension.

CAREER TECHNICAL PROGRAMS

Dept.	Program Name	Location(s)	Awards
ABR	Automotive Body Repair	Draper/Fountain	STC/C
AUM	Automotive Mechanics	Fountain/Main Campus	STC/C
VTR	Automotive Service Writer	Tutwiler	STC
BAR	Barbering	Fountain/Donaldson/Draper/Main	STC/C
CAB	Cabinetmaking	Main	STC/C
CAR	Carpentry	Bibb/Donaldson/Easterling/Fountain/Limestone/Main/ St. Clair	STC/C
COS	Cosmetology	Tutwiler	STC/C
DEM	Diesel Mechanics	Draper	STC/C
DDT	Drafting & Design Technology	Easterling/Limestone	STC/C
ELT	Electrical Technology	Bibb/Donaldson/Draper/Easterling/Limestone/St. Clair	STC/C
HOC	Horticulture	Limestone	STC/C
ASC	HVAC	Bibb/Donaldson/Draper/Fountain/Main/Ventress	STC/C
INT	Industrial Maintenance Technology	Limestone/Main/Ventress	STC/C
LGT	Logistics/Supply Chain Technology	Draper/Tutwiler	STC/C
MRT	Marine Technology	Main	STC
MAS	Masonry	Draper/St. Clair	STC/C
SET	Office Administration	Tutwiler	STC/C
PLB	Plumbing	Draper	STC/C
WDT	Welding	Draper/Fountain/Limestone/St. Clair/Main/Tutwiler	STC/C

Awards Key:

C – Certificate

STC – Short Term Certificate

NON-CREDIT TRAINING PROGRAMS

Program	Location(s)
Carpentry	Alabama Therapeutic Education Facility
Cosmetology	Alabama Therapeutic Education Facility
Commercial Truck Driving	Draper Instructional Service Center Tutwiler Instructional Service Center
Forklift Operation	Alabama Therapeutic Education Facility Bibb Correctional Facility Donaldson Correctional Facility Draper Instructional Service Center Easterling Correctional Facility Fountain Correctional Facility Limestone Correctional Facility Main Campus St. Clair Correctional Facility Tutwiler Instructional Service Center Ventress Correctional Facility
HVAC	Alabama Therapeutic Education Facility
OSHA 10-hour General Safety	Alabama Therapeutic Education Facility Bibb Correctional Facility Donaldson Correctional Facility Draper Instructional Service Center Easterling Correctional Facility Fountain Correctional Facility Limestone Correctional Facility Main Campus St. Clair Correctional Facility Tutwiler Instructional Service Center Ventress Correctional Facility
Plumbing	Alabama Therapeutic Education Facility
Swift Coding	Draper Instructional Service Center Main Campus Tutwiler Instructional Service Center
Utility Tree Trimming	PREP Center
Welding	Alabama Therapeutic Education Facility

AUTOMOTIVE BODY REPAIR

Program Overview

Automotive Body Repair (ABR) is a 60-semester hour program combining classroom theory with hands-on lab activities. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of automotive body repair.

Occupational Data¹

Automotive body repairers restore and refinish vehicle bodies and frames. They repair damage caused by collisions and make vehicles look and drive like new. According to the Bureau of Labor Statistics, the average annual salary for auto body technicians was \$47,020 in 2021. Employment of automotive body repairers is projected to grow two percent from 2020-2030, slightly slower than the average for all occupations. The best opportunities in automotive body repair field will be available to those with industry certification.

Awards

Certificate

Automotive Body Repair

Short Term Certificate

Components of Auto Body

Non-Structural Repair

Structural Repair

Surface Preparation & Refinishing

Industry Certification

National Career Readiness Credential

Program Contacts

Mr. Woody Chisum, Instructor
Draper Instructional Service Center
334-514-3589
woody.chisum@istc.edu

Mr. Thomas Rolin, Instructor
Fountain Correctional Facility
2224-285-5177
thomas.rolin@istc.edu

Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Credit Hours
ABR111	Non-Structural Repair	3
ABR114	Non-Structural Panel Replacement	3
ABR122	Surface Preparation	3
ABR123	Paint Application & Equipment	3
ABR151	Safety and Environmental Practices	3
ABR154	Automotive Glass and Trim	3
ABR156	Automotive Cutting and Welding	3
ABR213	Automotive Structural Analysis	3
ABR214	Automotive Structural Repair	3
ABR223	Automotive Mechanical Components	3
ABR224	Automotive Electrical Components	3
ABR255	Steering and Suspension	3
ABR258	Heating and AC in Collision Repair	3
ABR261	Restraint Systems	3
ABR265	Paint Defects and Final Repair	3
ABR269	Estimating and Damage Analysis	3

Required Academic Courses

Course	Title	Credit Hours
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Credit Hours
ABR157	Automotive Plastic Repair	3
ABR181	Special Topics in Auto Body	3
ABR182	Special Topics in Auto Body	3
ABR266	Alum. Welding in Collision Repair	3
ABR281	Special Topics in Auto Body	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Automotive Body Repair Certificate of Completion			Automotive Body Repair Structural Repair Short Term Certificate		
First Semester					
ABR111	Non-Structural Repair	3	ABR213	Automotive Structural Analysis	3
ABR114	Non-Structural Panel Replacement	3	ABR214	Automotive Structural Repair	3
ABR151	Safety & Environmental Practices	3	ABR255	Steering and Suspension	3
ABR156	Automotive Cutting and Welding	3	ABR269	Estimating and Damage Analysis	3
MAH101	Introductory Mathematics I	3	Total Credit Hours		12
Second Semester					
ABR213	Automotive Structural Analysis	3	Automotive Body Repair Surface Preparation and Refinishing Short Term Certificate		
ABR214	Automotive Structural Repair	3			
ABR255	Steering and Suspension	3	ABR122	Surface Preparation	3
ABR269	Estimating and Damage Analysis	3	ABR123	Paint Application & Equipment	3
ENG100	Vocational Technical English	3	ABR261	Restraint Systems	3
Third Semester			ABR265	Paint Defects & Final Repair	3
ABR122	Surface Preparation	3	Total Credit Hours		12
ABR123	Paint Application & Equipment	3			
ABR261	Restraint Systems	3			
ABR265	Paint Defects & Final Repair	3			
SPC103	Oral Communication Skills	3			
Fourth Semester			Automotive Body Repair Components of Auto Body Short Term Certificate		
ABR154	Automotive Glass and Trim	3			
ABR223	Automotive Mechanical Components	3	ABR154	Automotive Glass and Trim	3
ABR224	Automotive Electrical Components	3	ABR223	Automotive Mechanical Components	3
ABR258	Heating & AC in Collision Repair	3	ABR224	Automotive Electrical Components	3
DPT100	Introductory Computer Skills I	3	ABR258	Heating & AC in Collision Repair	3
Total Credit Hours		60	Total Credit Hours		12
Automotive Body Repair Non-Structural Repair Short Term Certificate					
ABR111	Non-Structural Repair	3			
ABR114	Non-Structural Panel Replacement	3			
ABR151	Safety & Environmental Practices	3			
ABR156	Automotive Cutting and Welding	3			
Total Credit Hours		12			

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

AUTOMOTIVE MECHANICS

Program Overview

Automotive Mechanics (AUM) is a 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of automotive mechanics.

Occupational Data¹

Automotive service technicians and mechanics, often called *service technicians* inspect, maintain, and repair cars and light trucks. According to the Bureau of Labor Statistics, the median annual wage for automotive mechanics and service technicians was \$46,880 in 2021. Employment in this field is projected to remain steady from 2020-2030. Job seekers should note industry certification is often required once the person is employed.

Awards

Certificate

Automotive Mechanics

Short Term Certificate

Braking Systems
Engine Performance
Heating/Air Conditioning
Transmissions
Wheel Alignment

Industry Certification

National Career Readiness Credential

Program Contacts

Mr. Richard Etheridge
Fountain Correctional Facility
334-285-5177
richard.etheridge@istc.edu

Mr. Eric McClellan, Instructor

Main Campus

334-514-1355

eric.mcclellan@istc.edu

Estimated Program Length

Award	Length	Cr. Hours
Short Term Certificate	1 semester	9
Certificate of Completion	5 semesters	60

Required Program Courses

Course	Title	Credit Hours
AUM101	Fundamentals of Auto Technology	3
AUM112	Electrical Fundamentals	3
AUM121	Braking Systems	3
AUM122	Steering and Suspension	3
AUM124	Automotive Engines	3
AUM130	Drive Train and Axles	3
AUM133	Motor Vehicle Air Conditioning	3
AUM162	Electrical and Electronic Systems	3
AUM212	Adv. Electrical/Electronic Systems	3
AUM220	Advanced Automotive Engines	3
AUM224	Manual Transmission/Transaxle	3
AUM230	Automatic Transmission/Transaxle	3
AUM239	Engine Performance	3
AUM244	Engine Performance/Diagnostics	3
AUM246	Automotive Emissions	3
AUM281	Special Topics	3

Required Academic Courses

Course	Title	Credit Hours
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Credit Hours
AUM182	Special Topics	2

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Automotive Mechanics Certificate of Completion			Automotive Mechanics Wheel Alignment Short Term Certificate		
First Semester					
AUM101	Fund. of Automotive Technology	3	AUM122	Steering and Suspension	3
AUM112	Electrical Fundamentals	3	AUM124	Automotive Engines	3
AUM121	Braking Systems	3	AUM162	Electrical and Electronic Systems	3
MAH101	Introductory Mathematics I	3	Total Credit Hours		9
Second Semester			Automotive Mechanics Heating/Air Conditioning Short Term Certificate		
AUM122	Steering and Suspension	3			
AUM124	Automotive Engines	3	AUM130	Drive Train and Axles	3
AUM162	Electrical and Electronic Systems	3	AUM133	Motor Vehicle Air Conditioning	3
ENG100	Vocational Technical English	3	AUM212	Adv. Electrical/Electronic Systems	3
Third Semester			Total Credit Hours		9
AUM130	Drive Train and Axles	3	Automotive Mechanics Engine Performance Short Term Certificate		
AUM133	Motor Vehicle Air Conditioning	3			
AUM212	Adv. Electrical/Electronic Systems	3	AUM220	Advanced Automotive Engines	3
SPC103	Oral Communication Skills	3	AUM239	Engine Performance	3
Fourth Semester			AUM244	Engine Performance & Diagnostics	3
AUM220	Advanced Automotive Engines	3	Total Credit Hours		9
AUM239	Engine Performance	3	Automotive Mechanics Transmission Short Term Certificate		
AUM244	Engine Performance & Diagnostics	3			
DPT100	Introductory Computer Skills I	3	AUM224	Manual Transmission/Transaxle	3
Fifth Semester			AUM230	Automatic Transmission/Transaxle	3
AUM224	Manual Transmission/Transaxle	3	AUM246	Automotive Emissions	3
AUM230	Automatic Transmission/Transaxle	3	AUM281	Special Topics	3
AUM246	Automotive Emissions	3	Total Credit Hours		12
AUM281	Special Topics	3	Automotive Mechanics Braking System Short Term Certificate		
Total Credit Hours		60			
			AUM101	Fund. of Automotive Technology	3
			AUM112	Electrical Fundamentals	3
			AUM121	Braking Systems	3
			Total Credit Hours		9

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

AUTOMOTIVE SERVICE WRITER

Program Overview

Automotive Service Writer (VTR) is a short-term certificate program combining classroom theory with hands-on practice in the laboratory. Students can earn stackable certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of service writing.

Occupational Data¹

Automotive service writers coordinate the process of obtaining information from the customer and setting the repair or maintenance process in motion. According to on-line job postings the median annual wage for automotive service writers was \$38,728 in August 2021. The Bureau of Labor Statistics projects that employment in this will decline slightly in the period from 2020-2030. Job seekers should note industry certification is often required once the person is employed.

Awards

Short Term Certificates

Introduction to Automotive Service Writing
Estimating for Automotive Service Writers
Intermediate Automotive Service Writing

Industry Certification

National Career Readiness Credential

Program Contact

Mr. Shawn Moore, Instructor
Tutwiler Instructional Service Center
334-514-8150
shawn.moore@istc.edu

Estimated Program Length

Award	Length	Cr. Hours
Short Term Certificate	1 semester	12

Required Program Courses

Course	Title	Credit Hours
VTR101	Shop Safety for Svc Writers	3
VTR102	Computer Skills for Svc Writers	3
VTR103	Business Comms for Svc Writers	3
VTR104	Customer Service for Svc Writers	3
VTR105	Gen Engine Diagnostics/Svc Writers	3
VTR106	Chassis, Brake & Drive Train Systems for Service Writers	3
VTR108	Records Mgmt. for Svc Writers	3
VTR109	Estimating & Damage Analysis for ASW	3
VTR110	Electrical & Electronic Systems for ASW	3
VTR113	Air Conditioning & Emissions Systems for Service Writers	3
VTR114	Inventory Control for Svc Writers	3
VTR115	Product Research & Purchasing for ASW	3

Automotive Service Writer Introduction to ASW Short Term Certificate

VTR101	Shop Safety for Svc Writers	3
VTR102	Computer Skills for Svc Writers	3
VTR103	Business Comms for Svc Writers	3
VTR105	Gen Engine Diagnostics/Svc Writers	3
Total Credit Hours		12

Automotive Service Writer Estimating for ASW Short Term Certificate

VTR104	Customer Service for Svc Writers	3
VTR106	Chassis, Brake & Drive Train Systems for Service Writers	3
VTR109	Estimating & Damage Analysis for ASW	3
VTR115	Product Research & Purchasing for ASW	3
Total Credit Hours		12

Automotive Service Writer Intermediate ASW Short Term Certificate

VTR108	Records Mgmt. for Svc Writers	3
VTR110	Electrical & Electronic Systems for ASW	3
VTR113	Air Conditioning & Emissions Systems for Service Writers	3
VTR114	Inventory Control for Svc Writers	3
Total Credit Hours		12

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

BARBERING

Program Overview

Barbering (BAR) is a 51-semester hour program combining class-room theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications.¹ The program prepares individuals to shave and trim facial/neck hair and beards, cut/style hair, give facial/scalp massages, apply cosmetic treatments, and obtain licensure.¹

Occupational Data²

Physical stamina is important for barbers as they are on their feet all day. Most work in shops or salons, many have a large and loyal client base. According to the Bureau of Labor Statistics, continuing demand for personal care services will result in new jobs nationwide and employment is projected to remain constant from 2020-2030.

Awards

Certificate

Barbering

Short Term Certificate

Barbering Fundamentals
Business Management
Chemical Texture Services

Industry Certification

National Career Readiness Credential

Program Contacts

Ms. Connie Barnett, Instructor
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Ms. Phoenix Wofford, Instructor
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phoenix.wofford@istc.edu

Estimated Program Length

Award	Length	Cr. Hours
Short Term Certificate	1 semester	9
Certificate of Completion	3 semesters	51

Required Program Courses

Course	Title	Credit Hours
BAR109	Bacteriology and Sanitation	3
BAR110	Orientation to Barbering	3
BAR111	Introduction to Barbering Lab	3
BAR112	Science of Barbering	3
BAR113	Fund. of Barbering Applications	3
BAR114	Barbering and Styling Lab	3
BAR115	Cutting and Styling Techniques	3
BAR120	Properties of Chemistry	3
BAR121	Chemical Hair Processing	3
BAR130	Marketing & Business Management	3
BAR132	Styling and Design	3
BAR133	Styling/Management Lab	3
BAR143	State Board Review	3

Required Academic Courses

Course	Title	Cr. Hours
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hours
BAR181	Special Topics in Barbering	1
BAR187	Special Topics in Barbering	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Barbering Certificate of Completion			Barbering Business Management Short-Term Certificate		
First Semester					
BAR109	Bacteriology and Sanitation	3	BAR114	Barbering and Styling Lab	3
BAR110	Orientation to Barbering	3	BAR130	Marketing & Business Management	3
BAR111	Introduction to Barbering Lab	3	BAR132	Styling and Design	3
BAR115	Cutting and Styling Techniques	3	BAR133	Styling/Management Lab	3
ENG100	Vocational Technical English	3	BAR143	State Board Review	3
			Total Credit Hours	15	
Second Semester					
BAR112	Science of Barbering	3			
BAR113	Fund. of Barbering Applications	3			
BAR120	Properties of Chemistry	3			
BAR121	Chemical Hair Processing	3			
MAH101	Introductory Mathematics I	3			
SPC103	Oral Communication Skills	3			
Third Semester					
BAR114	Barbering and Styling Lab	3			
BAR130	Marketing & Business Management	3			
BAR132	Styling and Design	3			
BAR133	Styling/Management Lab	3			
BAR143	State Board Review	3			
DPT100	Introductory Computer Skills I	3			
Total Credit Hours		51			
Barbering Barbering Fundamentals Short Term Certificate					
BAR109	Bacteriology and Sanitation	3			
BAR110	Orientation to Barbering	3			
BAR111	Introduction to Barbering Lab	3			
BAR115	Cutting and Styling Techniques	3			
Total Credit Hours		12			
Barbering Chemical Texture Services Short Term Certificate					
BAR112	Science of Barbering	3			
BAR113	Fund. of Barbering Applications	3			
BAR120	Properties of Chemistry	3			
BAR121	Chemical Hair Processing	3			
Total Credit Hours		12			

¹ Lauderdale, Madison, Mobile, and Jefferson counties have independently produced licensing requirements.

²Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook*

CABINETMAKING

Program Overview

Cabinetmaking (CAB) is a 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of cabinetmaking.

Occupational Data¹

Cabinetmakers work in residential and commercial settings, where they use creative skills in design and analytical skills to interpret drawings and layouts. Tasks include cutting, assembling, finish-sanding, staining and sealing wood cabinets. According to the Bureau of Labor Statistics, cabinetmakers earned an average of \$36,710 in 2021. Though companies are more likely to hire employees who are computer savvy, cabinet makers who are expert woodworkers will continue to have good job opportunities.

Awards

Certificate

Cabinetmaking

Short Term Certificate

Basic Cabinetmaking
Millwork and Finishing
Shop Management
Wood Turning

Industry Certification

National Career Readiness Credential
NCCER CORE
OSHA 10-hr General Industry Safety/Health

Program Contact

Mr. Ray Albright, Instructor
Main Campus
334-514-1364
ray.albright@istc.edu

Estimated Program Length

Award	Length	Cr. Hours
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hours
CAB101	Introduction to Cabinetmaking	3
CAB102	Intro to Lumber and Wood Products	3
CAB103	Sizes, Dimensions and Joints	3
CAB104	Cabinet Shop Operations	3
CAB110	Equipment Maintenance	3
CAB140	Wood Finishing Fundamentals	3
CAB141	Wood Finishing	3
CAB204	Cabinetmaking and Millwork	3
CAB205	Furniture Construction	3
CAB206	Special Projects in Furniture Const.	3
CAB211	Cabinet Installation and Trim Work	3
CAB225	Kitchen and Bath Design	6
CAB230	Estimating Costs in Cabinetmaking	3
CAB260	Woodturning I	3
CAB261	Wood Turning II	3

Required Academic Courses

Course	Title	Cr. Hours
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hours
CAB181	Special Topics	3
CAB182	Special Topics	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Cabinetmaking Certificate of Completion			Cabinetmaking Millwork and Finishing Short Term Certificate		
First Semester					
CAB101	Introduction to Cabinetmaking	3	CAB110	Equipment Maintenance	3
CAB102	Intro to Lumber and Wood Products	3	CAB140	Wood Finishing Fundamentals	3
CAB103	Sizes, Dimensions and Joints	3	CAB141	Wood Finishing	3
CAB104	Cabinet Shop Operations	3	CAB204	Cabinetmaking and Millwork	3
MAH101	Vocational Technical Mathematics I	3	Total Credit Hours		12
Second Semester					
CAB110	Equipment Maintenance	3	Cabinetmaking Wood Turning Short Term Certificate		
CAB140	Wood Finishing Fundamentals	3			
CAB141	Wood Finishing	3			
CAB204	Cabinetmaking and Millwork	3			
ENG100	Vocational Technical English	3	CAB205	Furniture Construction	3
Third Semester			CAB225	Kitchen and Bath Design	6
CAB205	Furniture Construction	3	CAB260	Wood Turning I	3
CAB225	Kitchen and Bath Design	6	CAB261	Wood Turning II	3
CAB260	Wood Turning I	3	Total Credit Hours		12
CAB261	Wood Turning II	3			
SPC103	Oral Communication Skills	3	Cabinetmaking Shop Management Short Term Certificate		
Fourth Semester					
CAB206	Special Projects in Furniture Const.	3	CAB206	Special Projects in Furniture Const.	3
CAB211	Cabinet Installation and Trim Work	3	CAB211	Cabinet Installation and Trim Work	3
CAB230	Estimating Costs in Cabinetmaking	3	CAB230	Estimating Costs in Cabinetmaking	3
DPT100	Introductory Computer Skills I	3	Total Credit Hours		9
Total Credit Hours		60			
Cabinetmaking Intro to Basic Cabinetmaking Short Term Certificate					
CAB101	Introduction to Cabinetmaking	3			
CAB102	Intro to Lumber and Wood Products	3			
CAB103	Sizes, Dimensions and Joints	3			
CAB104	Cabinet Shop Operations	3			
Total Credit Hours		12			

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

CARPENTRY

Program Overview

Carpentry (CAR) is a 48-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of carpentry.

Occupational Data¹

Carpenters construct, repair, and install building frameworks and structures made from wood and other materials. Their median annual wage was \$48,260 in 2021. According to the Bureau of Labor Statistics, employment of carpenters is expected to decline slightly from 2020-2030.

Awards

Certificate

Carpentry

Short Term Certificate

Cabinetry Basics
Floor & Wall Basics
Framing Fundamentals
Stairs, Molding & Finishing

Industry Certification

National Career Readiness Credential
NCCER CORE
NCCER Carpentry Level I
OSHA 10-hr General Industry Safety/Health

Program Contact

Mr. Spencer Day, Instructor
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Mr. Eddie Lucas, Instructor
Main Campus
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Mr. Eric Trahan, Instructor
Donaldson Correctional Facility
334-285-5177
Eric.trahan@istc.edu

Mr. Thomas Berwager
Easterling Correctional Facility
334-514-2951
thomas.berwager@istc.edu

Estimated Program Length

Award	Length	Cr. Hours
Short Term Certificate	1 semester	6
Short Term Certificate	1 semester	9
Short Term Certificate	1 semester	12
Certificate of Completion	3 semesters	48

Required Program Courses

Course	Title	Cr. Hours
CAR111	Construction Basics	3
CAR112	Floors, Walls, and Site Preparation	3
CAR113	Floors, Walls and Site Prep Lab	3
CAR114	Construction Basics Lab	3
CAR121	Introduction to Blueprint Reading	3
CAR131	Roof and Ceiling Systems	3
CAR132	Interior and Exterior Finish	3
CAR133	Roof and Ceiling Systems Lab	3
CAR203	Special Projects in Carpentry	3
CAR214	Introduction to Cabinetry	3
CAR224	Floor, Wall and Ceiling Specialties	3
CAR228	Stairs, Molding and Trim	3

Required Academic Courses

Course	Title	Cr. Hours
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hours
CAR122	Concrete and Forming	3
CAR123	Concrete and Forming Lab	3
ORT100	Orientation to the College	1

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Carpentry Certificate of Completion

First Semester

CAR111	Construction Basics	3
CAR114	Construction Basics Lab	3
CAR121	Introduction to Blueprint Reading	3
SPC103	Oral Communications Skills	3

Second Semester

CAR112	Floors, Walls, and Site Preparation	3
CAR113	Floors, Walls and Site Prep Lab	3
CAR132	Interior and Exterior Finish	3
MAH101	Vocational Technical Mathematics I	3

Third Semester

CAR131	Roof and Ceiling Systems	3
CAR133	Roof and Ceiling Systems Lab	3
CAR214	Introduction to Cabinetry	3
ENG100	Vocational Technical English I	3

Fourth Semester

CAR203	Special Projects in Carpentry	3
CAR224	Floor, Wall and Ceiling Specialties	3
CAR228	Stairs, Molding and Trim	3
DPT100	Introductory Computer Skills	3
Total Credit Hours		48

Carpentry Construction Basics & Safety Short Term Certificate

CAR111	Construction Basics	3
CAR114	Construction Basics Lab	3
CAR121	Introduction to Blueprint Reading	3
Total Credit Hours:		9

Carpentry Floor and Wall Basics Short Term Certificate

CAR112	Floors, Walls, and Site Prep	3
CAR113	Floors, Walls, and Site Prep Lab	3
CAR121	Introduction to Blueprint Reading	3
Total Credit Hours:		9

Carpentry Framing Fundamentals Short Term Certificate

CAR131	Roof and Ceiling Systems	3
CAR133	Roof and Ceiling Systems Lab	3
CAR214	Introduction to Carpentry	3
Total Credit Hours:		9

Carpentry Stairs, Molding and Finishing Short Term Certificate

CAR203	Special Projects in Carpentry	3
CAR-224	Floor, Wall and Ceiling Specialties	3
CAR-228	Stairs, Molding and Trim	3
Total Credit Hours:		9

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

COSMETOLOGY

Program Overview

Cosmetology (COS) is a 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. The program is designed to help students acquire the knowledge and skills needed to cut, trim, and style scalp, facial, and body hair, apply cosmetic preparations, perform manicures and pedicures, massage the head and extremities, and prepare for employment as a licensed cosmetologist.

Occupational Data¹

Physical stamina is important for cosmetologists as they are on their feet all day. Most work in shops or salons, many have a large and loyal client base. According to the Bureau of Labor Statistics, continuing demand for personal care services will result steady employment during the period from 2020-2030.

Awards

Certificate

Cosmetology

Short Term Certificate

Fundamentals of Chemical Services
Fundamentals of Cosmetology
Salon Management and Technology
Spa Techniques

Industry Certification

National Career Readiness Credential

Program Contact

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334-514-8153
dequandolyn.sims@istc.edu

Estimated Program Length

Award	Length	Cr. Hours
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hours
COS111	Introduction to Cosmetology	3
COS112	Introduction to Cosmetology Lab	3
COS113	Theory of Chemical Services	3
COS114	Chemical Services Lab	3
COS115	Hair Coloring Theory	3
COS116	Hair Coloring Lab	3
COS117	Basic Spa Technique	3
COS118	Basic Spa Techniques Lab	3
COS123	Cosmetology Salon Practices	3
COS125	Career/Personal Development	3
COS142	App Chemistry/Cosmetology Lab	3
COS144	Hair Shaping and Design	3
COS151	Nail Care	3
COS167	State Board Review	3
COS181	Special Topics	3
COS182	Special Topics	3

Required Academic Courses

Course	Title	Cr. Hours
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hours
COS152	Nail Care Applications	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Cosmetology Certificate of Completion			Cosmetology Spa Techniques Short Term Certificate		
First Semester					
COS111	Cosmetology Science and Art	3	COS117	Basic Spa Techniques	3
COS112	Cosmetology Science and Art Lab	3	COS118	Basic Spa Techniques Lab	3
COS113	Chemical Methodology	3	COS123	Cosmetology Salon Practices	3
COS114	Chemical Services Lab	3	COS144	Hair Shaping and Design	3
ENG100	Vocational Technical English I	3	Total Credit Hours		12
Second Semester			Cosmetology Salon Management and Technology Short Term Certificate		
COS115	Hair Coloring Theory	3			
COS116	Hair Coloring Lab	3			
COS142	App Chemistry/Cosmetology Lab	3	COS125	Career/Personal Development	3
COS151	Nail Care	3	COS167	State Board Review	3
DPT100	Introductory Computer Skills I	3	COS181	Special Topics	3
			COS182	Special Topics	3
			Total Credit Hours		12
Third Semester					
COS117	Basic Spa Techniques	3			
COS118	Basic Spa Techniques Lab	3			
COS123	Cosmetology Salon Practices	3			
COS144	Hair Shaping and Design	3			
MAH101	Introductory Mathematics I	3			
Fourth Semester					
COS125	Career/Personal Development	3			
COS167	State Board Review	3			
COS181	Special Topics	3			
COS182	Special Topics	3			
SPC103	Oral Communications Skills	3			
Total Credit Hours		60			
Cosmetology Fundamentals of Cosmetology Short Term Certificate					
COS111	Cosmetology Science and Art	3			
COS112	Cosmetology Science and Art Lab	3			
COS113	Chemical Methodology	3			
COS114	Chemical Services Lab	3			
Total Credit Hours		12			
Cosmetology Fundamentals of Chemical Services Short Term Certificate					
COS115	Hair Coloring Theory	3			
COS116	Hair Coloring Lab	3			
COS142	App Chemistry/Cosmetology Lab	3			
COS151	Nail Care	3			
Total Credit Hours		12			

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

DIESEL MECHANICS

Program Overview

Diesel Mechanics (DEM) is a 60-semester hour program combining classroom theory and hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of diesel mechanics.

Occupational Data¹

Diesel mechanics inspect, repair, and overhaul buses and trucks, and maintain and/or repair any type of diesel engine. Diesel mechanics usually work in repair shops but may occasionally repair vehicles on roadsides or at worksites. According to the Bureau of Labor Statistics, the median annual wage for diesel mechanics was \$48,690 in 2021. Job prospects will be best for those who have completed postsecondary training in diesel engine repair.

Awards

Certificate

Diesel Mechanics

Short Term Certificate

Electrical Fundamentals
Engine Repair
Heavy Duty Brake Repair
Train Service

Industry Certification

National Career Readiness Credential

Program Contact

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334-514-3590
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Estimated Program Length

Award	Length	Cr. Hours
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hours
DEM104	Basic Engines	3
DEM111	Equip Safety/Mech. Fundamentals	3
DEM122	Heavy Vehicle Brakes	3
DEM123	Pneumatics and Hydraulics	3
DEM124	Electronic Engine Systems	3
DEM125	Heavy Vehicle Drive Trains	3
DEM126	Advanced Engines	3
DEM127	Fuel Systems	3
DEM128	Heavy Vehicle Drive Train Lab	3
DEM129	Diesel Engine Lab	3
DEM130	Electrical/Electronic Fundamentals	3
DEM135	HV Steering/Suspension Systems	3
DEM137	Heating/AC/Refrigeration Systems	3
DEM170	Heavy Vehicle Air Brakes	3
DEM183	Special Topics in Power Train	3
DEM186	Special Projects in Comm. Vehicles	3

Required Academic Courses

Course	Title	Cr. Hours
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hours
DEM105	Preventive Maintenance	3
DEM181	Special Topics in Electrical	3
DEM182	Special Topics in Engines	3
DEM184	ST HD Brakes/Steering/Suspension	3
DEM191	Special Projects in Diesel Mechanics	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Diesel Mechanics Certificate of Completion			Diesel Mechanics Train Service Short Term Certificate		
First Semester					
DEM104	Basic Engines	3	DEM125	Heavy Vehicle Drive Trains	3
DEM111	Equip Safety/Mech Fundamentals	3	DEM128	Heavy Vehicle Drive Train Lab	3
DEM126	Advanced Engines	3	DEM183	Special Projects in Power Train	3
DEM129	Diesel Engine Lab	3	DEM186	Special Projects in Comm. Vehicles	3
MAH101	Introductory Mathematics I	3	Total Credit Hours		12
Second Semester			Diesel Mechanics Electrical Fundamentals Short Term Certificate		
DEM122	Heavy Vehicle Brakes	3	DEM124	Electronic Engine Systems	3
DEM123	Pneumatics and Hydraulics	3	DEM127	Fuel Systems	3
DEM135	HV Steering/Suspension Systems	3	DEM130	Electrical/Electronic Fundamentals	3
DEM170	Heavy Vehicle Air Brakes	3	DEM137	Heating/AC/Refrigeration Systems	3
ENG100	Vocational Technical English I	3	Total Credit Hours		12
Third Semester					
DEM125	Heavy Vehicle Drive Trains	3			
DEM128	Heavy Vehicle Drive Train Lab	3			
DEM183	Special Projects in Power Train	3			
DEM186	Special Projects in Comm. Vehicles	3			
DPT100	Introductory Computer Skills I	3			
Fourth Semester					
DEM124	Electronic Engine Systems	3			
DEM127	Fuel Systems	3			
DEM130	Electrical/Electronic Fundamentals	3			
DEM137	Heating/AC/Refrigeration Systems	3			
SPC103	Oral Communication Skills	3			
Total Credit Hours		60			
Diesel Mechanics Engine Repair Short Term Certificate					
DEM104	Basic Engines	3			
DEM111	Equip Safety/Mech. Fundamentals	3			
DEM126	Advanced Engines	3			
DEM129	Diesel Engine Lab	3			
Total Credit Hours		12			
Diesel Mechanics Heavy Duty Brake Repair Short Term Certificate					
DEM122	Heavy Vehicle Brakes	3			
DEM123	Pneumatics and Hydraulics	3			
DEM135	HV Steering/Suspension Systems	3			
DEM170	Heavy Vehicle Air Brakes	3			
Total Credit Hours		12			

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

DRAFTING & DESIGN TECHNOLOGY

Program Overview

Drafting & Design Technology (DDT)) is a 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can earn stackable certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of drafting and design technology.

Occupational Data¹

Drafters use software to convert the designs of architects and engineers into technical drawings. Most workers specialize in architectural, civil, electrical, or mechanical drafting and use technical drawings to help design everything from microchips to skyscrapers. According to the Bureau of Labor Statistics the median average wage for drafters was \$60,290 in 2021. Job growth is projected to decline in the coming decade, job openings will result from the need to replace workers who transfer to other occupations or exit the labor force.

Awards

Short Term Certificate

CAD Operator
Digital Machine Drafting
Residential Drafting and Design
Advanced Technical Drafting and Design

Industry Certification

National Career Readiness Credential
OSHA 10-hr General Industry Safety/Health

Program Contacts

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Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hrs.
DDT104	Basic CAD	3
DDT111	Fundamentals of Drafting/Design	3
DDT124	Basic Technical Drawing	3
DDT127	Intermediate CAD	3
DDT128	Intermediate Technical Drawing	3
DDT131	Machine Drafting Basics	3
DDT132	Architectural Drafting	3
DDT144	Basic 3D Modeling	3
DDT150	Theory of Residential Drawing/Design	3
DDT155	Drawing for Residential Construction	4
DDT181	Special Topics in Drafting/Design	3
DDT213	Civil Drafting, Platt Maps	3
DDT216	Design of Structural Wood Members	3
DDT220	Advanced Technical Drawing	3
DDT222	Advanced Architectural Drawing	3
DDT233	Intermediate 3D Modeling	3
DDT260	Portfolio	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Drafting & Design Technology

CAD Operator

Short Term Certificate

DDT104	Basic CAD	3
DDT111	Fundamentals of Drafting/Design	3
DDT124	Basic Technical Drawing	3
DDT128	Intermediate Technical Drawing	3
Total Credit Hours		12

Drafting & Design Technology

Digital Machine Drafting

Short Term Certificate

DDT131	Machine Drafting Basics	3
DDT144	Basic 3D Modeling	3
DDT220	Advanced Technical Drawing	3
DDT233	Intermediate 3D Modeling	3
Total Credit Hours		12

**Drafting & Design Technology
Residential Drafting and Design
Short Term Certificate**

DDT127	Intermediate Computer Aided Drafting and Design	3
DDT132	Architectural Drafting	3
DDT150	Theory of Residential Drawing/Design	3
DDT222	Advanced Architectural Drawing	3
Total Credit Hours		12

**Drafting & Design Technology
Advanced Technical Drafting and Design
Short Term Certificate**

DDT181	Special Topics in Drafting/Design	3
DDT182	Special Topics in Drafting/Design	3
DDT213	Civil Drafting, Platt Maps	3
DDT260	Portfolio	3
Total Credit Hours		12

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

ELECTRICAL TECHNOLOGY

Program Overview

Electrical Technology (ELT) is a 42-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of electrical technology.

Occupational Data¹

Electrical technicians install, operate, maintain, and repair electric systems including residential, commercial and industrial electric power wiring, AC/DC motors, controls, and electrical distribution panels. According to the Bureau of Labor Statistics the median average wage for electrical technicians was \$60,040 in 2021. Job growth over the coming decade is projected to grow around nine percent, much faster than other career fields.

Awards

Certificate

Electrical Technology

Short Term Certificate

Commercial/Industrial Wiring
Industrial Controls
Residential Wiring

Industry Certification

National Career Readiness Credential
NCCER CORE
NCCER Electrical Level 1
OSHA 10-hr General Industry Safety/Health

Program Contacts

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Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	9/12
Certificate of Completion	3 semesters	42

Required Program Courses

Course	Title	Cr. Hrs.
ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3
ELT110	Wiring Methods	3
ELT116	Residential Wiring	6
ELT117	AC/DC Machines	3
ELT118	Commercial/Industrial Wiring I	3
ELT209	Motor Controls I	3
ELT230	Programmable Controls	6

Required Academic Courses

Course	Title	Cr. Hrs.
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hrs.
ELT122	Advanced AC/DC Machines	3
ELT212	Motor Controls II	3
ELT241	National Electric Code	3
ELT242	Journeyman Master Prep Exam	3
ELT244	Conduit Bending and Installation	3
ELT245	Electrical Grounding Systems	3

**Electrical Technology
Commercial/Industrial Wiring
Short Term Certificate**

ELT110	Wiring Methods	3
ELT117	AC/DC Machines	3
ELT118	Commercial/Industrial Wiring I	3
Total Credit Hours		9

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

**Electrical Technology
Certificate of Completion****First Semester**

ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3
ELT116	Residential Wiring	6
ENG100	Vocational Technical English I	3

Second Semester

ELT110	Wiring Methods	3
ELT117	AC/DC Machines	3
ELT118	Commercial/Industrial Wiring I	3
DPT100	Introductory Computer Skills I	3
MAH101	Introductory Mathematics I	3

Third Semester

ELT209	Motor Controls I	3
ELT230	Programmable Controls	6
SPC103	Oral Communication Skills	3
Total Credit Hours		42

**Electrical Technology
Residential Wiring
Short Term Certificate**

ELT108	DC Fundamentals	3
ELT109	AC Fundamentals	3
ELT116	Residential Wiring	6
Total Credit Hours		12

**Electrical Technology
Industrial Controls
Short Term Certificate**

ELT209	Motor Controls I	3
ELT230	Programmable Controls	6
Total Credit Hours		9

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

HEATING, VENTILATION & AIR CONDITIONING

Program Overview

Heating, Ventilation and Air Conditioning is a maximum 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment.

Occupational Data¹

HVAC technicians work on HVAC systems that control the temperature and air quality in buildings. Because HVAC systems have become increasingly complex, employers generally prefer applicants with postsecondary education or who have completed an apprenticeship. Some states require technicians to be licensed. According to the Bureau of Labor Statistics, in 2021 the average salary for an HVAC technician was \$48,630 annually.

Awards

Certificate

Heating, Ventilation & Air Conditioning

Short Term Certificate

Basic Circuit Boards
Basic HVAC
Basic Repair Service
Repair Service

Industry Certification

EPA Refrigerant Handling
National Career Readiness Certificate
NCCER CORE/ HVAC Level 1
OSHA 10-hr General Industry Safety/Health

Program Contacts

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Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hrs.
ASC111	Principles of Refrigeration	3
ASC112	HVAC/R Service Procedures	3
ASC113	Refrigeration Piping Practices	3
ASC121	Principles of Electricity for HVAC/R	3
ASC122	HVAC/R Electric Circuits	3
ASC123	HVAC/R Electrical Components	3
ASC125	Fund of Gas/Electrical Heat Systems	6
ASC127	HVAC/R Electric Motors	3
ASC132	Residential Air Conditioning	3
ASC138	Customer Relations in HVAC/R	3
ASC147	Refrigerant T/R Theory	3
ASC152	Heat Pump Systems	6
ASC182	Special Topics in AC/Refrigeration II	3
ASC210	Troubleshooting HVAC/R Systems	3

Required Academic Courses - certificate

HORTICULTURE

Program Overview

Horticulture (HOC) is a 60-semester certificate program combining classroom theory with hands-on practice in the laboratory. Students can earn stackable certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of horticulture.

Occupational Data¹

Horticulture workers perform numerous tasks related to designing landscapes, planting and harvesting crops, planning and maintaining turf including that found on golf courses and other commercial settings. According to the Bureau of Labor Statistics the median annual wage for groundskeepers and nursery workers was \$35,460 in 2021. Employment in this field is projected to grow around 8 percent over the coming decade.

Awards

Short Term Certificates

Greenhouse and Orchard Production
Landscape Construction and Maintenance Basics
Landscape Design Basics
Landscape Design and Maintenance
Nursery Production
Plant Production

Industry Certification

National Career Readiness Credential
OSHA 10-hr General Industry Safety/Health

Program Contacts

Mr. Jeffrey Taylor, Instructor
Limestone Correctional Facility
334-285-5177
jeffrey.taylor@istc.edu

Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	12
Certificate	4 semesters	60

Required Program Courses

Course	Title	Cr. Hrs.
HOC111	Horticultural Business Management	3
HOC115	Soils & Fertilizers	3
HOC120	Plant Propagation	3
HOC125	Turf Management	3
HOC130	Nursery Production	3
HOC134	Introduction to Floriculture	2
HOC135	Ornamental Plant Identification	3
HOC136	Residential Landscape Design	3
HOC137	Commercial Landscape Design	3
HOC140	Pest Management	3
HOC151	Irrigation Systems	2
HOC167	Golf Course Maintenance	3
HOC175	Seminar in Horticulture	1
HOC176	Advanced Studies in Horticulture	2
HOC210	Greenhouse Management	3
HOC211	Greenhouse Crop Production	3
HOC216	Landscape Maintenance	3
HOC218	Landscape Construction	3
HOC230	Vegetable and Orchard Crops	3

Horticulture

Greenhouse and Orchard Production

Short Term Certificate

HOC134	Introduction to Floriculture	3
HOC140	Pest Management	3
HOC211	Greenhouse Crop Production	3
HOC230	Vegetable and Orchard Crops	3
Total Credit Hours		12

Horticulture

Landscape Construction and Maintenance Basics

Short Term Certificate

HOC135	Ornamental Plant Identification	3
HOC167	Golf Course Maintenance	3
HOC216	Landscape Maintenance	3
HOC218	Landscape Construction	3
Total Credit Hours		12

Horticulture		
Landscape Design Basics		
Short Term Certificate		
HOC111	Horticultural Business Management	3
HOC125	Turf Management	3
HOC137	Commercial Landscape Design	3
HOC151	Irrigation Systems	3
Total Credit Hours		12

Horticulture		
Nursery Production		
Short Term Certificate		
HOC115	Soils & Fertilizers	3
HOC120	Plant Propagation	3
HOC130	Nursery Production	3
HOC210	Greenhouse Management	3
Total Credit Hours		12

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

INDUSTRIAL MAINTENANCE TECHNOLOGY

Program Overview

Industrial Maintenance Technology (INT) is a 60-semester hour certificate program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can earn stackable certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of industrial maintenance.

Occupational Data¹

Industrial maintenance technicians maintain and repair factory equipment and other industrial machinery, such as conveying systems, production machinery, and packaging equipment. Millwrights install, dismantle, repair, reassemble, and move machinery in factories, power plants, and construction sites. According to the Bureau of Labor Statistics, the median annual wage for industrial maintenance technicians, machinery mechanics, machinery maintenance workers, and millwrights was \$59,380 in 2021. Employment in this field is projected to grow around 19 percent over the coming decade, as the need to keep increasingly sophisticated machinery functioning and efficient continues to create demand for qualified workers.

Awards

Certificate

Industrial Maintenance Technology

Short Term Certificates

Basic Industrial Mechanics
Millwright Technician
Plant Mechanic
Multicraft Maintenance Technician

Industry Certification

National Career Readiness Credential
NCCER CORE
NCCER Industrial Maintenance Level 1
OSHA 10-hr General Industry Safety/Health

Program Contact

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benjamin.freeman@istc.edu

Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	15
Certificate Of Completion	4 semester	60

Required Program Courses

Course	Title	Cr. Hrs.
INT100	Math for Industrial Technicians	3
INT101	DC Fundamentals	3
INT103	AC Fundamentals	3
INT105	Introduction to Process Technology	3
INT106	Elements of Industrial Mechanics	3
INT109	Components of Material Handling	3
INT112	Ind. Maintenance Safety Procedures	3
INT113	Industrial Motor Control I	3
INT117	Principles of Industrial Mechanics	3
INT118	Fund. of Ind. Pneumatics/ Hydraulics	3
INT121	Industrial Hydraulics Troubleshooting	3
INT127	Principles Ind. Pump/Piping Systems	3
INT134	Principles Ind. Maintenance Welding	3
INT161	Blueprint Reading/Ind. Technicians	3
INT184	Intro to PLCs	3
INT253	Industrial Robotics	3

Required Academic Courses

Course	Title	Cr. Hrs.
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Course

Course	Title	Cr. Hrs.
INT110	Automated Material Handling	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Industrial Maintenance
Industrial Maintenance - Emphasis in Basic
Industrial Mechanics
Short Term Certificate

INT100	Math for Industrial Technicians	3
INT103	AC Fundamentals	3
INT106	Elements of Industrials Mechanics	3
INT112	Ind. Maintenance Safety Procedures	3
ENG100	Vocational Technical English	3
Total Credit Hours		15

Industrial Maintenance
Industrial Maintenance – Emphasis in Millwright
Technician
Short Term Certificate

INT101	DC Fundamentals	3
INT109	Components of Material Handling	3
INT113	Industrial Motor Control I	3
INT117	Principles of Industrial Mechanics	3
DPT100	Introductory Computer Skills I	3
Total Credit Hours		15

Industrial Maintenance
Industrial Maintenance – Emphasis in Plant
Mechanic
Short Term Certificate

INT105	Introduction to Process Technology	3
INT118	Fund. of Ind. Pneumatics/ Hydraulics	3
INT121	Industrial Hydraulics Troubleshooting	3
INT127	Principles Ind. Pump/Piping Systems	3
MAH101	Introductory Mathematics I	3

Industrial Maintenance
Industrial Maintenance – Emphasis in Multicraft
Maintenance Technician
Short Term Certificate

INT134	Principles Ind. Maintenance Welding	3
INT161	Blueprint Reading/Ind. Technicians	3
INT184	Intro to PLCs	3
INT253	Industrial Robotics	3
SPC103	Oral Communication Skills	3
Total Credit Hours		15

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

LOGISTICS & SUPPLY CHAIN TECHNOLOGY

Program Overview

Logistics and Supply Chain Technology (LGT) is 48-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the logistics industry.

Occupational Data¹

Logistics is part of nearly every industry, with jobs that focus on purchasing, inventory control, storage and handling, shipping and delivery management, and transportation. Salaries vary depending on the type of work involved. According to the Bureau of Labor Statistics, in 2021 materials handlers earned around \$36,860 annually, while logisticians earned an average of \$77,030. Employment is projected to grow over the next decade, driven by the global economy.

Awards

Certificate

Logistics and Supply Chain Technology

Short Term Certificates

Logistics Operations I
Logistics/Supply Chain Technology
Warehouse Operation I
Warehouse Operation II

Industry Certification

National Career Readiness Credential
MSSC Certified Logistics Associate
MSSC Certified Logistics Technician
OSHA 10-hr General Industry Safety/Health

Program Contacts

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matt.poole@istc.edu

Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	9
Certificate of Completion	4 semesters	48

Required Program Courses

Course	Title	Cr. Hrs.
LGT106	Workplace Essentials	3
LGT108	Introduction to Logistics	3
LGT110	Warehouse Operations I	3
LGT111	Warehouse Operations II	3
LGT114	Supply Chain Fundamentals/Mgmt.	3
LGT115	Purchasing in Logistics	3
LGT120	Materials Management	3
LGT127	Logistics & Regulatory Compliance	3
LGT132	Physical Distribution Systems	3
LGT137	Warehouse and Inventory Mgmt.	3
LGT210	Quality Improvement in SCM	3
LGT271	Supply Chain Analytics	3

Required Academic Courses

Course	Title	Cr. Hrs.
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hrs.
LGT117	Survey/Automated Logistics Sys	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Logistics and Supply Chain Technology Certificate of Completion			Logistics and Supply Chain Technology Logistics/Supply Chain Technology Short Term Certificate		
First Semester					
LGT106	Workplace Essentials	3	LGT115	Purchasing in Logistic	3
LGT108	Introduction to Logistics	3	LGT127	Regulatory Compliance	3
LGT110	Warehouse Operations I	3	LGT271	Supply Chain Analytics	3
DPT100	Introductory Computer Skills I	3	Total Credit Hours		9
Second Semester					
LGT111	Warehouse Operations II	3			
LGT137	Warehouse Management	3			
LGT210	Quality Improvement	3			
MAH101	Introductory Mathematics I	3			
Third Semester					
LGT114	Supply Chain Fundamentals/Mgmt.	3			
LGT120	Materials Management	3			
LGT132	Physical Distribution Systems	3			
SPC103	Oral Communications Skills	3			
Fourth Semester					
LGT115	Purchasing in Logistic	3			
LGT127	Regulatory Compliance	3			
LGT271	Supply Chain Analytics	3			
ENG100	Vocational Technical English I	3			
Total Credit Hours		48			
Logistics and Supply Chain Technology Warehouse Operations I Short Term Certificate					
LGT106	Workplace Essentials	3			
LGT108	Introduction to Logistics	3			
LGT110	Warehouse Operations I	3			
Total Credit Hours		9			
Logistics and Supply Chain Technology Warehouse Operations II Short Term Certificate					
LGT111	Warehouse Operations II	3			
LGT137	Warehouse Management	3			
LGT210	Quality Improvement	3			
Total Credit Hours		9			
Logistics and Supply Chain Technology Logistics Operations I Short Term Certificate					
LGT114	Supply Chain Fundamentals/Mgmt.	3			
LGT120	Materials Management	3			
LGT132	Physical Distribution Systems	3			
Total Credit Hours		9			

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

MARINE TECHNOLOGY

Program Overview

Marine Technology (MRT) is a short-term certificate program combining classroom theory with hands-on practice in the laboratory. Students can earn stackable certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of marine technology.

Occupational Data¹

Marine technicians repair and adjust electrical and mechanical equipment of inboard or inboard-outboard boat engines. According to the Bureau of Labor Statistics the median annual wage for marine technicians was \$46,660 in 2021.

Awards

Short Term Certificates

Basic Marine Systems
Marine Technology

Industry Certification

National Career Readiness Credential
OSHA 10-hr General Industry Safety/Health

Program Contacts

Mr. Jerry Hamilton, Instructor
Main Campus
334-514-1359
jerry.hamilton@istc.edu

Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	13

Required Program Courses

Course	Title	Cr. Hrs.
MRT101	Marine Engines & Drives	3
MRT108	Maine Rigging & Trailers	3
MRT111	Services Operations/Customer Svc	3
MRT114	Fuel & Lubrication Systems	3
MRT124	Electrical systems & Diagnostics	4
MRT175	Basic Hydraulics	4
MRT200	Marine Engines & Outboard Drives	3
MRT220	Marine Engines & Stern Drives	3

Marine Technology

Basic Marine Systems

Short Term Certificate

MRT101	Marine Engines & Drives	3
MRT114	Fuel & Lubrication Systems	3
MRT175	Basic Hydraulics	4
MRT200	Marine Engines & Outboard Drives	3

Total Credit Hours **13**

Marine Technology

Marine Technology

Short Term Certificate

MRT108	Maine Rigging & Trailers	3
MRT111	Services Operations/Customer Svc	3
MRT124	Electrical systems & Diagnostics	4
MRT220	Marine Engines & Stern Drives	3

Total Credit Hours **13**

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

MASONRY

Program Overview

Masonry (MAS) is 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the masonry field.

Occupational Data¹

Masonry workers use bricks, concrete, natural and manmade stones to build walls, walkways, fences, and other structures. The work is physically demanding; masons lift heavy materials and often stand, kneel, and bend for long periods. According to the bureau of Labor Statistics, the median annual wage for masonry workers was \$48,040 in 2021. While employment is projected decline slightly from 2020-2030 the demand for skilled workers will remain constant.

Awards

Certificate

Masonry

Short Term Certificate

Brick/Block Masonry
Cement Masonry
Specialized Masonry
Stone Masonry

Industry Certification

National Career Readiness Credential
NCCER CORE
NCCER Masonry Level 1
OSHA 10-hr General Industry Safety/Health

Program Contacts

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Mr. Chad Spurlin, Instructor
St. Clair Correctional Facility
334-285-5177
chad.spurlin@istc.edu

Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hrs.
MAS111	Masonry Fundamentals	3
MAS121	Brick/Block Masonry Fundamentals	3
MAS131	Brick/Block Masonry Fund. II	3
MAS151	Brick/Block Masonry Fund. III	3
MAS161	Block Masonry Lab	3
MAS162	Brick Masonry Lab	3
MAS171	Residential/Commercial Masonry	3
MAS181	Special Topics in Masonry	3
MAS211	Stone Masonry	3
MAS231	Basic Cement Masonry	3
MAS251	Stone Masonry Lab	3
MAS252	Fireplace Construction	3
MAS253	Brick Arches Lab	3
MAS261	Specialized Masonry	3
MAS271	Basic Cement Masonry Lab	3
MAS272	Advanced Cement Masonry	3

Required Academic Courses

Course	Title	Cr. Hrs.
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hrs.
MAS221	Specialized Masonry	3
MAS282	Special Topics in Masonry	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Masonry Certificate of Completion			Masonry Stone Masonry Short Term Certificate		
First Semester					
MAS111	Masonry Fundamentals	3	MAS171	Residential/Commercial Masonry	3
MAS121	Brick/ Block Masonry Fundamentals	3	MAS211	Stone Masonry	3
MAS131	Brick/ Block Masonry Fund. II	3	MAS251	Stone Masonry Lab	3
MAS151	Brick/Block Masonry Fund. III	3	MAS252	Fireplace Construction	3
ENG100	Vocational Technical English I	3	Total Credit Hours		12
Second Semester					
MAS161	Block Masonry Lab	3	Masonry Specialized Masonry Short Term Certificate		
MAS162	Brick Masonry Lab	3			
MAS231	Basic Cement Masonry	3	MAS181	Special Topics in Masonry	3
MAS271	Basic Cement Masonry Lab	3	MAS253	Brick Arches Lab	3
MAH101	Introductory Mathematics I	3	MAS261	Specialized Masonry	3
			MAS272	Advanced Cement Masonry	3
			Total Credit Hours		12
Third Semester					
MAS171	Residential/Commercial Masonry	3			
MAS211	Stone Masonry	3			
MAS251	Stone Masonry Lab	3			
MAS252	Fireplace Construction	3			
SPC103	Oral Communication Skills	3			
Fourth Semester					
MAS181	Special Topics in Masonry	3			
MAS253	Brick Arches Lab	3			
MAS261	Specialized Masonry	3			
MAS272	Advanced Cement Masonry	3			
DPT100	Introductory Computer Skills I	3			
Total Credit Hours		60			
Masonry Brick/Block Masonry Short Term Certificate					
MAS111	Masonry Fundamentals	3			
MAS121	Brick/ Block Masonry Fundamentals	3			
MAS131	Brick/ Block Masonry Fund. II	3			
MAS151	Brick/Block Masonry Fund. III	3			
Total Credit Hours		12			
Masonry Cement Masonry Short Term Certificate					
MAS161	Block Masonry Lab	3			
MAS162	Brick Masonry Lab	3			
MAS231	Basic Cement Masonry	3			
MAS271	Basic Cement Masonry Lab	3			
Total Credit Hours		12			

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

OFFICE ADMINISTRATION

Program Overview

Office Administration is a 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the field of office administration.

Occupational Data¹

Office administration professionals typically perform clerical and administrative duties, including organizing files, preparing documents, scheduling appointments, and supporting other staff. They need strong communications and organizational skills and should be proficient with computers. According to the Bureau of Labor Statistics, the median annual wage for administrative assistants was \$39,680 in 2021. Those working in the legal and medical profession are compensated at a higher rate. Employment in this field is projected to decline over the coming decade, with most job openings the result of the need to replace workers who leave the occupation.

Awards

Certificate

Office Administration

Short Term Certificate

Bookkeeping Clerk
Clerk Typist
General Clerk

Industry Certification

Microsoft Office Specialist
National Career Readiness Credential

Program Contact

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Tutwiler Instructional Service Center
334-514-8149
kercilda.mcclarin@istc.edu

Estimated Program Length

Award	Length	Cr. Hrs.
Short Term Certificate	1 semester	9
Certificate of Completion	4 semesters	54

Required Program Courses

Course	Title	Cr. Hrs.
SET101	Beginning Keyboarding	3
SET104	Advanced Keyboarding	3
SET125	Basic Word Processing	3
SET126	Advanced Word Processing	3
SET133	Business Communications	3
SET134	Career and Professional Development	3
SET135	Financial Record Keeping	3
SET138	Records/Information Management	3
SET218	Office Procedures	3
SET230	Computerized Desktop Publishing	3
SET231	Office Applications	3
SET232	The Computerized Office	3
SET243	Spreadsheet Applications	3
SET244	Database Concepts	3
SET245	Data Entry	3
SET246	Office Graphics and Presentations	3

Required Academic Courses - certificate

Course	Title	Cr. Hrs.
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Electives may be offered at various times to develop a student's personal educational goals or for other instructional purposes.

Office Administration Certificate of Completion

First Semester

SET101	Beginning Keyboarding	3
SET125	Basic Word Processing	3
SET134	Career/Professional Development	3
ENG100	Vocational Technical English	3

Second Semester

SET104	Advanced Keyboarding	3
SET135	Financial Recordkeeping	3
SET243	Spreadsheet Applications	3
SPC103	Oral Communication Skills	3

Third Semester

SET126	Advanced Word Processing	3
SET133	Business Communications	3
SET218	Office Procedures	3
SET245	Data Entry	3
MAH101	Introductory Mathematics I	3

Fourth Semester

SET138	Records/Information Management	3
SET230	Computerized Desktop Publishing	3
SET244	Database Concepts	3
SET246	Office Graphics and Presentations	3
DPT100	Introductory Computer Skills I	3
Total Credit Hours		54

Office Administration**Clerk Typist****Short Term Certificate**

SET101	Beginning Keyboarding	3
SET125	Basic Word Processing	3
SET134	Career/Professional Development	3
Total Credit Hours		9

Office Administration**Bookkeeping Clerk****Short Term Certificate**

SET104	Advanced Keyboarding	3
SET135	Financial Recordkeeping	3
SET243	Spreadsheet Applications	3
Total Credit Hours		9

Office Administration**General Clerk****Short Term Certificate**

SET126	Advanced Word Processing	3
SET133	Business Communications	3
SET218	Office Procedures	3
SET245	Data Entry	3
Total Credit Hours		12

Office Administration**Record Management Clerk****Short Term Certificate**

SET138	Records/Information Management	3
SET230	Computerized Desktop Publishing	3
SET244	Database Concepts	3
SET246	Office Graphics and Presentations	3
Total Credit Hours		12

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

PLUMBING

Program Overview

Plumbing (PLB) is a 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. This program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the plumbing industry.

Occupational Data¹

Plumbers install and repair pipes that carry liquids or gases to, from, and within businesses, homes, and factories. Most states and localities require plumbers to be licensed. According to the Bureau of Labor Statistics, the median annual wage for plumbers was \$59,770 in 2021. Employment is projected to grow five percent from 2020-2030. New construction, building maintenance and repair will drive the demand for skilled workers

Awards

Certificate

Plumbing

Short Term Certificate

Basic Pipe Joining Technique
R/C Water, Drain Waste & Vent System
Plumbing Repair System

Industry Certification

AL Plumbers & Gas Fitters Journeyman Cert
National Career Readiness Credential
NCCER CORE
NCCER Plumbing Level 1
OSHA 10-hr General Industry Safety/Health

Program Contacts

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334-514-3585
john.thompson@istc.edu

Estimated Program Length

Course	Title	Cr. Hrs.
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hrs.
PLB111	Introduction to Plumbing	3
PLB112	Plumbing Applications	3
PLB113	Pipe & Fittings	3
PLB114	Joining Pipes & Fittings	3
PLB115	Pressure/Non-Pressure Systems	3
PLB116	Pressure/Non-Pressure Sys Apps.	3
PLB117	Plumbing Codes	3
PLB118	Code Applications	3
PLB119	Fund/Gas Piping Sys for Heating	3
PLB122	Special Projects: Gas Fitting Code	3
PLB211	Plumbing Repair and Installation	3
PLB212	Plumbing Repair and Install Lab	3
PLB213	Process Piping	3
PLB214	Process Piping Applications	3
PLB217	Pumps and Compressors	3
PLB218	Pumps & Compressors Applications	3

Required Academic Courses

Course	Title	Cr. Hrs.
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hrs.
PLB120	Special Project: Plumbing Code I	1
PLB121	Special Projects: Plumbing Code II	1

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

Plumbing Certificate of Completion		Plumbing Plumbing Repair Systems Short Term Certificate			
First Semester		Short Term Certificate			
PLB111	Introduction to Plumbing	3	PLB211	Plumbing Repair and Installation	3
PLB112	Plumbing Applications	3	PLB212	Plumbing Repair and Install Lab	3
PLB113	Pipes & Fittings	3	PLB217	Pumps & Compressors	3
PLB114	Joining Pipes & Fittings	3	PLB218	Pumps & Compressors Applications	3
ENG100	Vocational Technical English I	3	Total Credit Hours		12
Second Semester		Plumbing Gas, Piping and Code Short Term Certificate			
PLB115	Pressure/Non-Pressure Systems	3	PLB119	Fund/Gas Piping Systems for Heating	3
PLB116	Pressure/Non-Pressure System Apps	3	PLB122	Special Project: Gas Code	3
PLB117	Plumbing Codes	3	PLB213	Process Piping	3
PLB118	Code Applications	3	PLB214	Process Piping Applications	3
MAH101	Introductory Mathematics I	3	Total Credit Hours		12
Third Semester					
PLB211	Plumbing Repair and Installation	3			
PLB212	Plumbing Repair and Install Lab	3			
PLB217	Pumps & Compressors	3			
PLB218	Pumps & Compressors Applications	3			
SPC103	Oral Communication Skills	3			
Fourth Semester					
PLB119	Fund/Gas Piping Systems for Heating	3			
PLB122	Special Project: Gas Code	3			
PLB213	Process Piping	3			
PLB214	Process Piping Applications	3			
DPT100	Introductory Computer Skills I	3			
Total Credit Hours		60			
Plumbing Basic Pipe Joining Techniques Short Term Certificate					
PLB111	Introduction to Plumbing	3			
PLB112	Plumbing Applications	3			
PLB113	Pipes & Fittings	3			
PLB114	Joining Pipes & Fittings	3			
Total Credit Hours		12			
Plumbing Residential/Commercial-Water, Drain Waste & Vent Systems Short Term Certificate					
PLB115	Pressure/Non-Pressure Systems	3			
PLB116	Pressure/Non-Pressure System Apps	3			
PLB117	Plumbing Codes	3			
PLB118	Code Applications	3			
Total Credit Hours		12			

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

WELDING

Program Overview

Welding (WDT) is 60-semester hour program combining classroom theory with hands-on practice in the laboratory. Requirements for the certificate of completion include four academic courses totaling 12 semester hours and all required career technical courses. Students can also earn stackable short-term certificates and industry certifications. The program is designed to help students acquire the knowledge, skills and abilities needed to prepare for successful entry-level employment in the welding profession.

Occupational Data¹

Welders use hand-held or remotely controlled equipment to join or cut metal parts, and to fill holes, indentations, or seams in metal products.

According to the Bureau of Labor Statistics, the median annual wage for welders was \$47,010 in 2021, and employment is projected to grow about eight percent from 2020-2030.

Awards

Certificate
Welding

Short Term Certificate
Construction Welding
Consumable Welding
Industrial Welding
Welding Certification w/ Pipe Cert.

Industry Certification

National Career Readiness Credential
OSHA 10-hr General Industry Safety/Health

Program Contacts

Mr. Bradley Black, Instructor
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Estimated Program Length

Course	Title	Cr. Hrs.
Short Term Certificate	1 semester	12
Certificate of Completion	4 semesters	60

Required Program Courses

Course	Title	Cr. Hrs.
WDT108	SMAW Fillet/OFC	3
WDT109	SMAW Fillet/PAC/CAC	3
WDT110	Industrial Blueprint Reading	3
WDT119	GMA/Flux Cored Arc Welding	3
WDT120	SMAW Groove	3
WDT122	SMAW Fillet/OFC Lab	3
WDT123	SMAW Fillet/PAC/CAC Lab	3
WDT124	GMAW/Flux Cored Arc Wdg Lab	3
WDT125	SMAW Grooves Lab	3
WDT157	Consumable Welding Processes	3
WDT158	Consumable Welding Processes Lab	3
WDT218	Certification	3
WDT223	Blueprint Reading for Fabrication	3
WDT228	GTAW	3
WDT258	Certification Lab	3
WDT268	GTAW Lab	3

Required Academic Courses

Course	Title	Cr. Hrs.
DPT100	Introductory Computer Skills I	3
ENG100	Vocational Technical English	3
MAH101	Introductory Mathematics I	3
SPC103	Oral Communication Skills	3

Elective Courses

Course	Title	Cr. Hrs.
WDT180	Special Topics	3
WDT181	Special Topics	3
WDT219	Welding Inspection and Testing	3
WDT257	SMAW Carbon Pipe Lab	3
WDT280	Special Topics	3
WDT281	Special Topics	3

Electives may be offered to meet a student's personal educational goals or for instructional purposes.

**Welding
Certificate of Completion**

First Semester

WDT108	SMAW Fillet/OFC	3
WDT109	SMAW Fillet/PAC/CAC	3
WDT122	SMAW Fillet/OFC Lab	3
WDT123	SMAW Fillet/PAC/CAC Lab	3
MAH101	Vocational Technical Mathematics I	3

Second Semester

WDT119	GMA/Flux Cored Arc Welding	3
WDT124	GMA/Flux Cored Arc Welding Lab	3
WDT157	Consumable Welding Processes	3
WDT158	Consumable Welding Processes Lab	3
ENG100	Vocational Technical English I	3

Third Semester

WDT110	Industrial Blueprint Reading	3
WDT120	Shielded Metal Arc Welding Grooves	3
WDT125	SMAW Groove Lab	3
WDT223	Blueprint Reading for Fabrication	3
SPC103	Oral Communication Skills	3

Fourth Semester

WDT218	Certification	3
WDT228	Gas Tungsten Arc Welding	3
WDT258	Certification Lab	3
WDT268	Gas Tungsten Arc Lab	3
DPT100	Vocational Technical Computers	3
Total Credit Hours		60

Welding

**Construction Welding
Short Term Certificate**

WDT108	SMAW Fillet/OFC	3
WDT109	SMAW Fillet/PAC/CAC	3
WDT122	SMAW Fillet/OFC Lab	3
WDT123	SMAW Fillet/PAC/CAC Lab	3
Total Credit Hours		12

Welding

**Consumable Welding
Short Term Certificate**

WDT119	GMA/Flux Cored Arc Welding	3
WDT124	GMA/Flux Cored Arc Welding Lab	3
WDT157	Consumable Welding Processes	3
WDT158	Consumable Welding Processes Lab	3
Total Credit Hours		12

Welding

**Industrial Welding
Short Term Certificate**

WDT110	Industrial Blueprint Reading	3
WDT120	Shielded Metal Arc Welding Grooves	3
WDT125	SMAW Groove Lab	3
WDT223	Blueprint Reading for Fabrication	3
Total Credit Hours		12

Welding

**Welding Certification w/Pipe Cert.
Short Term Certificate**

WDT218	Certification	3
WDT228	Gas Tungsten Arc Welding	3
WDT258	Certification Lab	3
WDT268	Gas Tungsten Arc Lab	3
Total Credit Hours		12

¹ Bureau of Labor Statistics, U.S. Department of Labor,
Occupational Outlook Handbook

COURSE DESCRIPTIONS

Automotive Body Repair

ABR111 Non-Structural Repair (1/2/3)

Prerequisite: As required by program.

Students are introduced to basic principles of non-structural panel repair. Topics include shop safety, identification and use of hand/power tools, sheet metal repairs, and materials. Upon completion, students should be able to perform basic sheet metal repairs.

ABR114 Non-Structural Panel Replacement (1/2/3)

Prerequisite: As required by program.

Students are introduced to the principles of non-structural panel replacement. Topics include replacement and alignment of bolt-on panels, full and partial panel replacement procedures, and attachment methods.

ABR 122 Surface Preparation (1/2/3)

Prerequisite: As required by program.

This course introduces students to methods of surface preparation for vehicle refinishing. Topics include sanding techniques, metal treatment, selection and use of undercoats, and proper masking procedures.

ABR123 Paint Applications & Equipment (1/2/3)

Prerequisite: As required by program.

This course introduces students to methods of paint application and equipment used for vehicular refinishing. Topics include spray gun and related equipment use, paint mixing, matching and applying the final topcoat.

ABR151 Safety & Environmental Practices (1/2/3)

Prerequisite: As required by program.

This course is designed to instruct students in safe work practices. Topics include OSHA requirements, and EPA regulations as well as state and local laws. Upon completion, students should be knowledgeable in shop safety and environmental regulations. CORE

ABR154 Automotive Glass and Trim (1/2/3)

Prerequisite: As required by program.

This course is a study of automotive glass and trim. Emphasis is placed on removal and replacement of structural and nonstructural glass and automotive trim. Upon completion, students should be able to remove and replace automotive trim and glass.

ABR156 Automotive Cutting and Welding (1/2/3)

Prerequisite: As required by program.

Students are introduced to the various automotive cutting and welding processes. Emphasis is placed on safety, plasma arc, oxy-acetylene cutting, resistance type spot welding, and Metal Inert Gas (MIG) welding. Upon

completion, students should be able to safely perform automotive cutting and welding procedures.

ABR157 Automotive Plastic Repairs (1/2/3)

Prerequisite: As required by program.

This course provides instruction in automotive plastic repairs. Topics include plastic welding (airless, hot and chemical), use of flexible repair fillers, identification of types of plastics, and determining the correct repair procedures for each. Upon completion, students should be able to correctly identify and repair the different types of automotive plastics.

ABR181 Special Topics in Auto Body (0/3/3)

Prerequisite: As required by program.

The courses are guided independent studies in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon completion, students should be able to demonstrate skills to meet specific needs.

ABR182 Special Topics in Auto Body (0/3/3)

Prerequisite: As required by program.

The courses are guided independent studies in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon completion, students should be able to demonstrate skills to meet specific needs.

ABR213 Automotive Structural Analysis (1/2/3)

Prerequisite: As required by program.

Students learn methods of determining structural misalignment. Topics include methods of inspection, types of measuring equipment, data sheets, and identifying types of structural damage.

ABR214 Automotive Structural Repair (1/2/3)

Prerequisite: As required by program.

This course provides instruction in the correction of structural damage. Topics include types and use of alignment equipment, anchoring and pulling methods, and repair/replacement of structural components.

ABR223 Automotive Mechanical Components (1/2/3)

Prerequisite: As required by program.

This course provides instruction in collision related mechanical repairs. Emphasis is placed on diagnosis and repairs to drive train, steering/suspension components and other mechanical repair.

ABR224 Automotive Electrical Components (1/2/3)

Prerequisite: As required by program.

This course provides instruction in collision related electrical repairs and various restraints systems, including seat belts, seat belt tensioners, and airbag. Topics include basic DC theory, types of diagnostic equipment, circuit protection, wire repair, use of wiring diagrams, airbag modules, and impact sensors.

ABR255 Steering and Suspension (1/2/3)

Prerequisite: As required by program.

This course introduces students to the various types of suspension and steering systems used in the automotive industry. Emphasis is placed on system component, suspension angles and effect of body/frame alignment on these components and angles.

ABR258 Heating & AC in Collision Repair (1/2/3)

Prerequisite: As required by program.

This course is a study of automotive air conditioning, heating, and cooling systems. Topics include automotive air conditioning, heating and cooling systems theory, component replacement and system service.

ABR261 Restraint Systems (1/2/3)

Prerequisite: As required by program.

Both the function and design of various restraints and passive restraint systems, including seat belts, seat belt tensioners, and airbags, will be discussed. Topics include airbag modules and impact sensors for both front and side air bag systems. Students learn about using service manuals, flow charts, and wiring diagrams during the diagnosis and repair process.

ABR265 Paint Defects and Final Repair (1/2/3)

Prerequisite: As required by program.

This course introduces students to methods of identifying paint defects, causes, cures, and final detailing. Students learn to troubleshoot and correct paint imperfections.

ABR266 Aluminum Welding in Collision Repair (1/2/3)

Prerequisite: As required by program.

This course covers the principles and techniques of aluminum GMA (MIG) welding. Students learn to set up and tune a welding machine, address safety issues, perform proper welding techniques, prepare metal surfaces, and identify and correct weld defects.

ABR269 Estimating and Damage Analysis (1/2/3)

Prerequisite: As required by program.

This course introduces the students to the principles of collision/damage estimation. Topics include cost and time estimations, determinations of repair or replacement of parts, and whether to use new, used, or aftermarket parts. Upon completion of this course, students should be able to provide a handwritten or computerized damage report/estimate.

ABR281 Special Topics in Auto Body (0/3/3)

Prerequisite: As required by program.

This course is guided independent study in special projects to give the student additional training in a specific area selected by the instructor. Emphasis is placed on individual student needs to improve or expand skills. Upon course completion, students should be able to demonstrate skills to meet specific needs.

Automotive Mechanics

AUM101 Fundamentals/Automotive Technology (1/2/3)

Prerequisite: As required by program.

This course provides basic instruction in fundamentals of automotive technology. CORE.

AUM 112 Electrical Fundamentals (1/2/3)

Prerequisite: As required by program.

This course introduces the principles and laws of electricity. Emphasis is placed on diagrams, test equipment, and identifying series, parallel and series-parallel circuits. Upon completion, students should be able to calculate, build, and measure circuits. CORE

AUM 121 Braking Systems (1/2/3)

Prerequisite: As required by program.

This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of brakes. ABR 223 Automotive Mechanical Components is a suitable substitute for this course. CORE

AUM 122 Steering and Suspension (1/2/3)

Prerequisite: As required by program.

This course provides instruction in automotive technology or auto mechanics. Emphasis is placed on the practical application of steering and suspension. CORE

AUM 124 Automotive Engines (1/2/3)

Prerequisite: As required by program.

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. CORE

AUM 130 Drive Train and Axles (1/2/3)

Prerequisite: As required by program.

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. ABR223 Automotive Mechanical Components may be substituted for this course. CORE.

AUM133 Motor Vehicle Air Conditioning (1/2/3)

Prerequisite: As required by program.

This course provides basic instruction in theory, operation and repair of automotive heating and air conditioning systems. Emphasis is placed on the understanding and repair of vehicle air conditioning and heating systems, including but not limited to air management, electrical and vacuum controls, refrigerant recovery, and component replacement. ABR 258-Heating and AC in Collision Repair is a suitable substitute for this course.

AUM162 Electrical and Electronic Systems (1/2/3)

Prerequisite: As required by program.

This is an intermediate course in automotive electrical and electronic systems. Emphasis is placed on trouble-shooting and repair of battery, starting, charging, and lighting systems, subsystems, and components. CORE

AUM 182 Special Topics (0/2/2)

Prerequisite: As required by program.

This course is designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics' applications and with evaluation at the instruction's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any area in automotive mechanics. Upon completion, students should be able to work with minimum instruction and execute the necessary techniques to finish a live work project of their choice.

AUM212 Adv. Electrical/Electronic Systems (1/2/3)

Prerequisite: As required by program.

This course provides instruction in advanced auto-motive electrical and electronic systems. Emphasis is placed on troubleshooting and repair of advanced electrical and electrical and electronic systems, subsystems and components.

AUM220 Advanced Automotive Engines (1/2/3)

Prerequisite: As required by program.

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.

AUM224 Manual Transmissions/Transaxle (1/2/3)

Prerequisite: As required by program.

This course covers basic instruction in manual transmissions and transaxles. Emphasis is placed on understanding and application of basic internal and external operation relating to proper operation and drivability.

AUM230 Auto Transmissions/Transaxle (1/2/3)

Prerequisite: As required by program.

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. CORE.

AUM239 Engine Performance (1/2/3)

Prerequisite: As required by program.

This course provides basic instruction in engine performance with emphasis on fuel and ignition systems relating to engine operation. CORE

AUM244 Engine Performance and Diagnostics (1/2/3)

Prerequisite: As required by program.

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 drive ability.

AUM246 Automotive Emissions (1/2/3)

Prerequisite: As required by program.

This is an introductory course in automotive emission systems. Emphasis is placed on troubleshooting and repair of systems, subsystems and components.

AUM281 Special Topics (0/3/3)

Prerequisite: As required by program.

This course is designed to allow the student to specialize in a particular area of study with minimum instruction in automotive mechanics' applications and with evaluation at the instruction's discretion. Emphasis is placed on a topic/project that the student is interested in and may include any area in automotive mechanics. Upon completion, students should be able to work with minimum instruction and execute the necessary techniques to finish a live work project of their choice.

Automotive Service Writer

VTR101 Shop Safety for Service Writers (2/1/3)

Prerequisite: As required by program.

This course is designed to instruct the student in the safe use of tools, equipment, and appropriate work practices. Topics include OSHA requirements, "Right to Know" laws, EPA regulations, and state/local laws.

VTR102 Computer Skills for Service Writers (2/1/3)

Prerequisite: As required by program.

This course presents the foundations prepare the student in the use of computerized equipment such as data-entry software, industry-standard software to maximize productivity, terminology, proper file and disk management procedures, appropriate software, modern technology used in the creation, protection, and disposition of records stored in a variety of forms. Upon completion, the student

should be able to demonstrate proficiency in the operation and management of hardware and software related to industry-applied usage

VTR103 Business Comms for Service Writers (3/0/3)

Prerequisite: As required by program.

This course is designed to provide the student with skills necessary to communicate effectively in the context of the mechanical repair field. Students should be able to apply communication principles to produce clear, correct, logically organized business communications.

VTR104 Customer Service for Service Writers (3/0/3)

Prerequisite: As required by program.

This course presents the foundations required for developing skills and knowledge to work effectively with vendors and customers. Students will gain an understanding of the skills, attitudes, and thinking patterns needed to win customer satisfaction and loyalty, as well as interpret customer concerns and effectively communicate those concerns to technicians.

VTR105 Gen Engine Diagnostics/Service Writers (0/3/3)

Prerequisite: As required by program.

This course provides instruction in engine diagnostics. Emphasis will be placed on effective use of technology to identify and troubleshoot problems with engines, lubrication and cooling systems, ignition and fuel systems and other conditions impacting drivability.

VTR106 Chassis, Brake & Drive Train Systems for Service Writers (0/3/3)

Prerequisite: As required by program.

This course provides instruction in proper setup and operation of chassis, brake, and drive train systems. Emphasis will be placed on assessment, diagnosis, and common repair needs of these systems.

VTR108 Records Management/ Service Writers (1/2/3)

Prerequisite: As required by program.

This course is designed to provide the student with skills in basic office filing procedures, and the use of technology to streamline records processes and security when entering material parts and financial data into a digital computing system. Emphasis is on the use of appropriate software in the preparation of financial statements, purchase orders, payment receipts, as well as records disposition.

VTR109 Est. & Damage Analysis/Service Writers (2/1/3)

Prerequisite: As required by program.

This course introduces students to the principles of collision/damage estimation. Topics include cost and time estimations, determinations of repair or replacement of parts, and whether to use new, used, or aftermarket parts. Upon completion of this course students will be able to provide a handwritten or computerized damage report/estimate.

VTR110 Elec. & Electronic Systems/Svc Writers (1/2/3)

Prerequisite: As required by program.

This is a course in automotive electrical and electronic systems. Emphasis is placed on troubleshooting and diagnosis of battery, starting, charging, and lighting systems, subsystems, and components.

VTR110 Elec. & Electronic Systems/Svc Writers (1/2/3)

Prerequisite: As required by program.

This is a course in automotive electrical and electronic systems. Emphasis is placed on troubleshooting and diagnosis of battery, starting, charging, and lighting systems, subsystems, and components.

VTR113 AC/Emissions Systems for Svc Writers (1/2/3)

Prerequisite: As required by program.

This is an introductory course in automotive emission systems. Emphasis is placed on troubleshooting, diagnosis, and repair of systems, subsystems, and components.

VTR114 Inventory Control for Service Writers (2/1/3)

Prerequisite: As required by program.

This course provides students with introductory information relative to safe and efficient operation of a warehouse and material handling equipment. Specific topics include warehouse safety, common warehouse functions, roles, accountability, and responsibilities, warehouse management systems, warehouse layout and design, and material handling equipment.

VTR115 Product Research & Purchasing (3/0/3)

Prerequisite: As required by program.

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 use of efficient and effective purchasing practices to ensure the best uses of resources.

Barbering

BAR109 Bacteriology and Sanitation (3/0/3)

Prerequisite: As required by program.

This course provides the theory of bacteriology and sanitation. Topics include the types of bacteria and sanitation procedures, and razor shaving. Upon completion, the student should be able to identify types of bacteria and methods of sanitation.

BAR110 Orientation to Barbering (3/0/3)

Prerequisite: As required by program.

This course provides an orientation to professional barber styling. Topics include professional image, basic fundamentals, and the history of barber styling. Upon completion, student should be able to identify core concepts of the profession.

BAR111 Introduction to Barbering Lab (0/3/3)

Prerequisite: As required by program.

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. CORE

BAR 112 Science of Barbering (3/0/3)

Prerequisite: As required by program.

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. CORE

BAR 113 Fundamentals of Barbering Applications (0/3/3)

Prerequisite: As required by program.

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. CORE

BAR 114 Barber-Styling Lab (0/3/3)

Prerequisite: As required by program.

This course provides students with the opportunity to demonstrate skills in hair care, hair cutting, and facial massage. Emphasis is placed on safety and infection control.

BAR115 Cutting and Styling Techniques (0/3/3)

Prerequisite: As required by program.

This course provides practical experience in basic scissor and clipper haircutting. Upon completion, the student will be able to cut and style client's hair demonstrating correct scissor and clipper cutting and styling techniques.

BAR120 Properties of Chemistry (3/0/3)

Prerequisite: As required by program.

This course provides the student with basic knowledge of chemicals used in barber styling. Topics include the changes produced in the hair and skin through exposure to chemicals, electricity, and special light spectrums. Upon completion, the student should understand the proper use of implements and chemicals to treat hair and skin.

BAR121 Chemical Hair Processing (0/3/3)

Prerequisite: As required by program.

This course provides students with opportunities to apply the use of chemicals to alter the appearance of hair. Emphasis is placed on the use of chemicals to relax, wave, and soft curl the hair. Upon completion, students will be

competent in the use of chemicals to produce desired structure changes to the hair.

BAR 130 Marketing & Business Management (3/0/3)

Prerequisite: As required by program.

This course provides the student with marketing and management skills that are essential for successful salon management. Topics include first aid, job search, bookkeeping, selling techniques, shop floor plans, shop location, and legal regulations. Upon completion, the student should be aware of marketing and business management requirements for a successful salon.

BAR 132 Styling and Design (3/0/3)

Prerequisite: As required by program.

This course introduces the student to the art of hair style and design. Topics include the selection of styles to create a mood or complement facial features as well as hair replacement and hair pieces. Upon completion, the student should know the principles of style and design.

BAR143 State Board Review (1/2/3)

Prerequisite: As required by program.

Students are provided a complete review of all written and practical procedures in barbering and state board requirements. Upon completion students should be able to demonstrate the practical skills necessary to meet the requirements of state board certification and employment.

BAR 181 Special Topics in Barbering (1/0/1)

Prerequisite: As required by program.

This course provides specialized instruction in various areas related to the barbering profession. Student learning outcomes are developed to support specific student needs.

BAR 187 Special Topics in Barbering (0/3/3)

Prerequisite: As required by program.

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

Cabinetmaking

CAB101 Introduction to Cabinetmaking (1/2/3)

Prerequisite: As required by program.

This is a beginning woodworking course, which deals with basic materials, and processes. Topics include basic safety procedures while in the Cabinet shop, an introduction to the safe use of tools and equipment, basic measurement principles, wood products, cutting, and fastening. Upon course completion, students should be able to safely inspect and use shop equipment, measure, mark, and perform various types of cuts, and assemble a specified project. CORE

CAB102 Intro to Lumber & Wood Products (2/1/3)

Prerequisite: As required by program.

This is an introductory course to lumber, grades, sizes, characteristics and uses. Topics include the natural properties of trees, identification of various types of wood, the milling process, various defects found in wood, and how it is manufactured. Upon completion the students should be knowledgeable in the use of wood and wood products for the production of cabinets and fine furniture. CORE

CAB103 Sizes, Dimensions and Joints (1/2/3)

Prerequisite: As required by program.

This course includes the study of cutting lumber to dimensions and materials to size with power tools. Emphasis is on job planning and the construction of all types of joints made with hand and power tools. Upon course completion, students should be able to plan jobs, make shop drawings, job layouts and patterns. CORE

CAB104 Cabinet Shop Operations (3/0/3)

Prerequisite: As required by program.

This course covers start up and general operation of a cabinet shop. Topics include shop organization, fire safety, financing, and tool acquisition. Upon completion, students should have basic knowledge of starting a custom cabinet shop.

CAB110: Equipment Maintenance (1/2/3)

Prerequisite: As required by program.

This is an introductory course to maintaining woodworking tools and equipment. Emphasis is on equipment inspection, cleaning and lubrication, as well as removing and replacing saw blades, jointer, shaper, and planer knives. Upon course completion, students should be proficient in maintaining basic woodworking equipment. CORE

CAB140 Wood Finishing Fundamentals (1/2/3)

Prerequisite: As required by program.

This is an introductory wood finishing course. Topics include sanding, filling, staining, brushing and spraying. Upon course completion, students should be able to perform basic wood finishing procedures. CORE

CAB141 Wood Finishing (0/3/3)

Prerequisite: As required by program.

This course is a continuation of CAB 140. Emphasis is on filling, rubbing, spraying, and building up finishes. Upon course completion, students should be able to perform wood finishing procedures.

CAB181 Special Topics (0/3/3)

Prerequisite: As required by program.

This course is designed to allow the student to specialize in a particular area of study with minimum instruction in cabinetmaking application and with evaluation at the instructor's discretion. Emphasis is placed on an advanced topic that may include any woodworking project related to cabinetmaking. Upon completion, the student should be able to work with minimum instruction and execute the necessary techniques to finish a live work project.

CAB182 Special Topics (0/3/3)

Prerequisite: As required by program.

This course is designed to allow the student to specialize in a particular area of study with minimum instruction in cabinetmaking application and with evaluation at the instructor's discretion. Emphasis is placed on an advanced topic that may include any woodworking project related to cabinetmaking. Upon completion, the student should be able to work with minimum instruction and execute the necessary techniques to finish a live work project.

CAB204 Cabinetmaking and Millwork (1/2/3)

Prerequisite: As required by program.

This course focuses on all aspects of cabinet millwork and construction. Topics include casework, frame and panel components, cabinet supports, doors, drawers, and cabinet and tabletops. Upon completion students should be able to perform all functions necessary to construct basic cabinets.

CAB205 Furniture Construction (1/2/3)

Prerequisite: As required by program.

This course covers design and construction of fine furniture. Emphasis is on the development of basic furniture construction skills, such as milling, joining, building jigs and fixtures. Upon course completion, students should be able to perform basic skills necessary to construct fine furniture.

CAB206 Special Projects/Furniture Construction (0/3/3)

Prerequisite: As required by program.

This course is a continuation of the study and performance of advanced furniture projects that began in CAB 205. Emphasis is on shaping, routing and carving. Upon course completion, students should be able to perform advanced skills necessary to construct fine furniture.

CAB211 Cabinet Installation & Trim Work (1/2/3)

Prerequisite: As required by program.

This course introduces students to cabinet installation and trim work. Emphasis is placed upon cabinet shipping and handling, cabinet and countertop installation, and trim work. Upon completion of the course, students should be able to explain proper cabinet handling procedures as well as the appropriate sequence and methods of installing kitchen and bathroom cabinets and installing all appropriate trim work for the job.

CAB225 Kitchen and Bath Design (2/4/6)

Prerequisite: As required by program.

This course offers instruction in utilizing CAD for kitchen and bath design. Emphasis is placed on computer use and design requirements for kitchens and baths. Upon course completion, students should be familiar with kitchen and bath design by utilizing CAD software for this purpose.

CAB230 Estimating Costs in Cabinetmaking (3/0/3)

Prerequisite: As required by program.

This course focuses on estimating costs necessary to complete cabinetmaking projects. Emphasis is on figuring costs of materials and labor and on the use of pertinent

formulas. Upon course completion, students should be able to estimate costs of complete cabinetmaking projects.

CAB260 Woodturning I (1/2/3)

Prerequisite: As required by program.

This course focuses on turning components for fine furniture projects. Emphasis is on operation and maintenance of wood lathes and tools. Upon course completion, students should be able to turn duplicate posts and table legs.

CAB261 Wood Turning II (0/3/3)

Prerequisite: As required by program.

This course is the lab component of CAB 260. It allows for further time to turn components for fine furniture projects. Emphasis is on operation and maintenance of wood lathes and tools. Upon course completion, students should be able to turn duplicate posts and table legs.

Carpentry

CAR111 Construction Basics (3/0/3)

Prerequisite: As required by program.

This course introduces students to the opportunities in and requirements of the construction industry. Topics include economic outlook for construction, employment outlook, job opportunities, training, apprenticeship, entrepreneurship, construction tools, materials, and equipment, job safety and OSHA standards. Upon course completion, students should be able to identify the job market, types of training, knowledge of apprenticeship opportunities, construction tools, materials, equipment, and safety procedures.

CAR112 Floors, Walls and Site Prep (3/0/3)

Prerequisite: As required by program.

This course introduces the student to site preparation, floor and wall layout, and construction. Topics include methods of site preparation, measurement and 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 course completion, students will be able to identify various types of wall and floor framing systems and their components, identify building lines, setbacks, and demonstrate a working knowledge of leveling applications.

CAR113 Floors, Walls and Site Prep Lab (0/3/3)

Prerequisite: As required by program.

In this course the student will engage in applications of site preparation, floor and wall layout, and construction. Emphasis is placed on following job safety procedures, the use of required tools and equipment, performing site preparation, laying out and framing a floor system, and laying out, and erecting walls. Students will use various measurement and leveling tools, identify and install beams, girders, floor joists, sub-flooring, and install various wall components such as partitions, bracing, headers, sills, doors

and windows, and corners. Upon course completion, students should be able to follow proper safety procedures, identify building lines and setbacks, ensure proper site preparation, layout and frame a floor, and layout, frame and erect walls.

CAR114 Construction Basics Lab (0/3/3)

Prerequisite: As required by program.

This course provides practical and safe application of hand, portable power, stationary and pneumatic tools, use of building materials, fasteners and adhesives, and job site safety. Emphasis is placed on the safe use of hand, power, and pneumatic tools, proper selection of lumber, plywood, byproducts, nails, bolts, screws, adhesives, fasteners, construction materials, and job safety. Upon course completion, the student should be able to identify hand, power, stationary, and pneumatic tools and demonstrate their safe use; identify and properly select wood and non-wood building products, and properly use nails, fasteners and adhesives.

CAR121 Introduction to Blueprint Reading (3/0/3)

Prerequisite: As required by program.

This course introduces the students to the basic concepts of blueprint reading. Topics include scales, symbols, site plans, notations, schedules, elevations, sections, specifications, and detail drawings. Upon completion, the student should be able to identify drawings, scale various drawings, identify different types of lines, symbols, and notations, as well as use plot plans, describe easements, understand building code concepts, locate utilities, and explain various aspects of all types of plans and drawings.

CAR122 Concrete and Forming (3/0/3)

Prerequisite: As required by program.

This course introduces the student to concrete, its properties and uses, and procedures for designing concrete forms. Topics include making and pouring concrete, constructing concrete forms, reinforcement methods, finishing concrete, and job safety. Upon completion, students should be able to list safety rules for the job site, list what concrete is made of, describe how concrete forms are built, and how concrete is poured, reinforced, and finished.

CAR123 Concrete and Forming Lab (0/3/3)

Prerequisite: As required by program.

This course provides practical experience in mixing concrete, building forms, using reinforcing materials, pouring and finishing concrete, and demonstrating proper safety techniques at the job site. Emphasis is placed on job site safety, concrete forming, mixing, pouring, finishing and reinforcing. Upon completion, the student should be able to demonstrate job safety, set forms, reinforce, mix, pour and finish concrete correctly.

CAR131 Roof and Ceiling Systems (3/0/3)

Prerequisite: As required by program.

This course focuses on framing ceilings and roofs. Emphasis is placed on the various types of ceiling and roofing frames, rafters, trusses, ceiling joists, roof decking, and roofing materials. Upon completion, students should be able to explain how to frame a roof and ceiling, identify proper installation methods of roofing materials, and describe applicable safety rules.

CAR132 Interior and Exterior Finishing (1/2/3)

Prerequisite: As required by program.

This course introduces the student to interior and exterior finishing materials and techniques. Topics include trim of windows and doors, ceilings and wall molding, exterior siding, trim work, painting, and masonry finishes. Upon completion, the student should be able to identify different types of doors, windows and moldings and describe the uses of each, identify types of exterior sidings and trim, and describe the different types of paint and their proper application.

CAR133 Roof and Ceiling Systems Lab (0/3/3)

Prerequisite: As required by program.

The course provides students with practical experience in roof and ceiling layout, framing and installation. Upon completion, the student should be able to layout and frame a roof and ceiling, cut and install rafters, and joists, install trusses, cut and apply roof decking and roofing materials, and apply job site safety rules.

CAR203 Special Projects in Carpentry (0/3/3)

Prerequisite: As required by program.

This course allows the student to plan, execute, and present results of individual projects in carpentry. Emphasis is placed on enhancing skill attainment in the carpentry field. This culminating course allows students to independently apply skills attained in previous courses.

CAR214 Introduction to Cabinetry (1/2/3)

Prerequisite: As required by program.

This is an introductory cabinetry course. Emphasis is placed on design and construction of cabinetry. Upon completion, the student should be able to design and build cabinets according to specification.

CAR224 Floor, Wall and Ceiling Specialties (1/2/3)

Prerequisite: As required by program.

This course focuses on advanced interior applications for floors, walls, and ceilings. Topics may include paneling, hard wood floors, drop ceilings, acoustical ceilings, tray ceilings, and box ceilings. Upon completion the students should have a working knowledge of the specialties covered.

CAR228 Stairs, Molding and Trim (1/2/3)

Prerequisite: Determined by instructor.

This course focuses on the basics of stair design, layout, and construction. Topics also include cutting and installing stair trim and molding. Upon course completion, students

should be able to layout, cut and construct stairs, and install trim and molding.

Computer Science

DPT 100 Introductory Computer Skills I (3/0/3)

Prerequisite: As required by program

This course places emphasis on the usage of personal computers and software applications for personal and workplace use. Topics include impact of computers in business and industry, word processing, spreadsheets, ethical issues, database, and related concepts. Upon completion, the student will be able to demonstrate computer skills as applied to occupational-related fields.

DPT 103 Introductory Computer Skills II (3/0/3)

Prerequisite: As required by program

This course is designed to focus on further development of computer skills. The course will generally use software packages appropriate to occupational programs and may include such topics as word processing, database, basic graphics, spreadsheets or other features typically needed in the field. Upon completion, the student will be able to demonstrate proficiency by the completion of appropriate assignments and occupation-specific applications.

Cosmetology

COS111 Introduction to Cosmetology (3/0/3)

Prerequisite: As required by program.

This course is designed to provide students with an overview of the history and development of cosmetology and standards of professional behavior. Students receive basic information regarding principles and practices of infection control, diseases, and disorders. Additionally, students receive introductory information regarding hair design. The information presented in this course is enhanced by hands-on application performed in a controlled lab environment. Upon completion, students should be able to apply safety rules and regulations and write procedures for skills identified in this course. CORE

COS112 Introduction to Cosmetology Lab (0/3/3)

Prerequisite: As required by program.

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. CORE

COS113 Theory of Chemical Services (3/0/3)

Prerequisite: As required by program.

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.

COS114 Chemical Services Lab (0/3/3)

Prerequisite: As required by program.

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.

COS115 Hair Coloring Theory (3/0/3)

Prerequisite: As required by program.

In this course, students learn the techniques of hair coloring and hair lightening. Emphasis is placed on color application, laws, levels and classifications of color and problem solving. Upon completion, the student will be able to identify all classifications of hair coloring and the effects on the hair.

COS116 Hair Coloring Lab (0/3/3)

Prerequisite: As required by program.

In this course, students apply hair coloring and hair lightening techniques. Topics include consultation, hair analysis, skin test and procedures and applications of all classifications of hair coloring and lightening. Upon completion, the student should be able to perform procedures for hair coloring and hair lightening.

COS 117 Basic Spa Techniques (3/0/3)

Prerequisite: As required by program.

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. Topics include massage skin analysis, skin structure, disease and disorder, light therapy, facials, facial cosmetics, anatomy, hair removal, and nail care. Upon completion, the student will be able to state procedures for analysis, light therapy, facials, hair removal, and identify the structures, functions, disorders of the skin, and nail care.

COS118 Basic Spa Techniques Lab (0/3/3)

Prerequisite: As required by program.

This course provides practical applications related to the care of the skin and related structure. Emphasis is placed on facial treatments, product application, skin analysis, massage techniques, facial make-up, hair removal, and nail care. 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.

COS123 Cosmetology Salon Practices (0/3/3)

Prerequisite: As required by program.

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.

COS125 Career and Personal Development (3/0/3)

Prerequisite: As required by program.

This course provides the study and practice of personal development and career building. Emphasis is placed on building and retaining clientele, communications skills, customer service, continuing education, and goal setting. Upon completion, the student should be able to communicate effectively and practice methods for building and retaining clientele.

COS133 Salon Management Technology (1/2/3)

Prerequisite: As required by program.

This course is designed to develop entry-level management skills for the beauty industry. Topics include job-seeking, leader and entrepreneurship development, business principles, business laws, insurance, marketing, and technology issues in the workplace. Upon completion, the student should be able to list job-seeking and management skills and the technology that is available for use in the salon.

COS142 Applied Chemistry for Cosmetology Lab (0/3/3)

Prerequisite: As required by program.

This course provides practical applications of the knowledge of hair and skin learned in reference to chemical reactions, as well as the chemical application to the hair and skin. Emphasis is placed on knowledge of basic chemistry, pH scale, cosmetic chemistry, and physical and chemical changes in the hair and skin structure. Upon completion, the student should be able to determine the proper chemical product for each prescribed service.

COS144 Hair Shaping and Design (1/2/3)

Prerequisite: As required by program.

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 design.

COS151 Nail Care (1/2/3)

Prerequisite: As required by program.

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

COS152 Nail Care Applications (0/3/3)

Prerequisite: As required by program.

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.

COS167 State Board Review (1/2/3)

Prerequisite: As required by program.

Students are provided a complete review of all procedures and practical skills pertaining to their training in the program. Upon completion, the student should be able to demonstrate the practical skills necessary to successfully complete the required State Board of Cosmetology examination and entry-level employment.

COS181 Special Topics (3/0/3)

Prerequisite: As required by program.

This course is designed to allow students to explore issues relevant to the profession of cosmetology. Upon completion, students should have developed new skills in areas of specialization for the cosmetology profession.

COS182 Special Topics (0/3/3)

Prerequisite: As required by program.

This course is designed to allow students to explore issues relevant to the profession of cosmetology. Upon completion, students should have developed new skills in areas of specialization for the cosmetology profession.

Diesel Mechanics

DEM 104 Basic Engines (1/2/3)

Prerequisite: As required by program.

This course is designed to give the student knowledge of the diesel engine components and auxiliary systems, the proper way to maintain them, and the proper procedures for testing and rebuilding components. Emphasis is placed on safety, theory of operation, inspection, and measuring and rebuilding diesel engines according to factory specifications. Upon completion students should be able to measure, diagnose problems, and repair diesel engines.

DEM 105 Preventative Maintenance (1/2/3)

Prerequisite: As required by program.

This course provides instruction on how to plan, develop and install equipment surveillance and reliability strategies. Descriptions of various maintenance techniques for specialized preventive programs are discussed and computerized parts and equipment inventories and fleet management systems software are emphasized. Upon completion, students should be able to set up and follow a preventive maintenance schedule as directed by manufacturers.

DEM111 Equipment Safety/Mech. Fundamentals (1/2/3)

Prerequisite: As required by program.

This course provides instruction in the fundamentals of vehicle operation and safety when basic service work is to be performed in the shop. Topics include service manuals, mechanical fundamentals, preventive maintenance and component adjustment. Upon completion, students should be able to demonstrate knowledge of the fundamentals of vehicle operation and safety in the shop.

DEM122 Heavy Vehicle Brakes (1/2/3)

Prerequisite: As required by program.

This course covers the theory and repair of braking systems used in medium and heavy-duty vehicles. Topics include air, hydraulic, and ABS system diagnosis and repair. Upon completion, students should be able to troubleshoot, adjust, and repair braking systems on medium and heavy-duty vehicles.

DEM 123 Pneumatics and Hydraulics (1/2/3)

Prerequisite: As required by program.

This course provides instruction in the identification and repair of components found in hydraulic and pneumatic systems. Topics include schematics and symbols used in fluid power transmission and the troubleshooting of components in these systems. Upon completion, students should be able to diagnose, adjust, and repair hydraulic and pneumatic system components.

DEM124 Electronic Engine Systems (1/2/3)

Prerequisite: As required by program.

This course introduces the principles of electronically controlled diesel engines. Emphasis is placed on testing and adjusting diesel engines in accordance with manufacturers' specifications. Upon completion, students should be able to diagnose, test, and calibrate electronically controlled diesel engines.

DEM 125 Heavy Vehicle Drive Trains (1/2/3)

Prerequisite: As required by program.

This course introduces operational principles of mechanical medium and heavy-duty vehicle transmissions. Topics include multiple counter shafts power takeoffs, slider idler clutches, friction clutches, mechanical transmission power components and hydraulics. Upon completion, students should be able to diagnose, inspect and repair mechanical transmission.

DEM126 Advanced Engines (1/2/3)

Prerequisite: As required by program.

This course provides instruction in the disassembly, inspection, and rebuilding of diesel and heavy-duty gas engines. Emphasis is placed on the manufacturer's standards and factory recommended service tools and equipment. Upon completion, students should be able to disassemble, inspect, and rebuild engines according to the manufacturer's specifications.

DEM 127 Fuel Systems (1/2/3)

Prerequisite: As required by program.

This course is designed to provide practice in troubleshooting, fault code diagnosis, information retrieval, calibration, repair and replacement of fuel injectors, nozzles, and pumps. Emphasis is placed on test equipment, component functions, and theory. Upon completion, students should be able to diagnose, service, and repair fuel systems and governors.

DEM 128 Heavy Vehicle Drive Train Lab (0/3/3)

Prerequisite: As required by program.

This lab provides reinforcement of material covered in DEM 116 or DEM 125. Students will apply the knowledge they learned on driveshaft, power take-offs, standard transmissions, fluid drives, torque converters, clutch assemblies, drive axles, and special drives through experiential learning techniques. Upon completion, students should be able to diagnose, inspect, remove, repair or replace, and install heavy vehicle drive train components.

DEM 129 Diesel Engine Lab (0/3/3)

Prerequisite: As required by program.

This lab allows the student to refine the skills required to repair diesel engines.

DEM130 Electrical/Electronic Fundamentals (1/2/3)

Prerequisite: As required by program.

This course introduces the student to basic Electrical / Electronic concepts and fundamentals. It provides the principles of electricity, magnetism, and Ohm's Law. Emphasis is placed on batteries, starting, charging, and lighting circuits, which include series, parallel, and series-parallel circuits. Troubleshooting and repair of wiring harnesses, starting motors, charging systems, and accessories are included along with the computerized monitoring of vehicle systems. Upon completion, students should be able to identify components, test systems, and repair minor electrical problems according to manufacturer's literature.

DEM135 HV Steering/Suspension Systems (1/2/3)

Prerequisite: As required by program.

This course introduces the theory and principles of medium and heavy-duty steering and suspension systems. Topics include wheel and tire problems, frame members, fifth wheel, bearings, and coupling systems. Upon completion, students should be able to troubleshoot, adjust, and repair suspension and steering components on medium and heavy-duty vehicles.

DEM137 Heating/AC/Refrigeration Systems (1/2/3)

Prerequisite: As required by program.

This course provides instruction in fundamentals, diagnosis, and repair of cab and cargo heating and refrigeration systems. Topics include operation theory, safety, maintenance, recycling and recovery procedures,

recharging procedures, troubleshooting procedures, refrigerant leaks, and system repairs.

DEM170 Heavy Vehicle Air Brakes (1/2/3)

Prerequisite: As required by program.

This course covers the theory and repair of air braking systems used in medium and heavy-duty vehicles. Topics include air, and ABS system diagnosis and repair. Upon completion, students should be able to troubleshoot, adjust, and repair air braking systems on medium and heavy-duty vehicles.

DEM181 Special Topics in Electrical (0/3/3)

Prerequisite: As required by program.

This course provides specialized instruction in various areas related to the electrical systems of the diesel mechanics industry. Emphasis is placed on meeting students' needs.

DEM182 Special Topics in Engines (0/3/3)

Prerequisite: As required by program.

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

DEM183 Special Topics in Power Train (0/3/3)

Prerequisite: As required by program.

This course provides specialized instruction in various areas related to the power train in the diesel mechanics industry. Emphasis is placed on meeting students' needs.

DEM184 ST HD Brakes/Steering/Suspension (0/3/3)

Prerequisite: As required by program.

This course provides specialized instruction in various areas related to heavy duty brakes, steering, and suspension systems in the diesel mechanics industry. Emphasis is placed on meeting students' needs.

DEM186 Special Projects in Commercial Vehicles (1/2/3)

Prerequisite: As required by program.

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

DEM191 Special Project in Diesel Mechanics (1/2/3)

Prerequisite: As required by program.

This course provides information on current trends in diesel mechanics as they relate to employment responsibilities. Topics may vary by term to reflect relevant training needs of the industry.

Drafting and Design Technology

DDT104 Basic Computer Aided Drafting/Design (1/2/3)

Prerequisite: As required by program.

This course introduces basic Computer Aided Drafting and Design (CADD) functions and techniques, using "hands-on" applications. Topics include terminology, hardware, basic CADD and operating system functions, file manipulation,

and basic CADD software applications in producing softcopy and hardcopy.

DDT111 Fund./Drafting/Design Technology (1/2/3)

Prerequisite: As required by program.

This course serves as an introduction to the field of drafting and design and provides a foundation for the entire curriculum. Topics include safety, lettering, tools and equipment, geometric constructions, orthographic sketching, and drawing.

DDT124 Basic Technical Drawing (1/2/3)

Prerequisite: As required by program.

This course covers sections, auxiliary views, and basic space geometry. Emphasis will be placed on the theory as well as the mechanics of applying sections, basic dimensioning, auxiliary views, and basic space geometry.

DDT127 Int. Computer Aided Drafting/Design (1/2/3)

Prerequisite: As required by program.

This course covers intermediate-level concepts and applications of CADD. Emphasis will be placed on intermediate-level features, commands, and applications of CADD software.

DDT128 Intermediate Technical Drawing (1/2/3)

Prerequisite: As required by program.

This course is designed to develop a strong foundation in common drafting and design practices and procedures. Topics include multi-view working drawings with advanced dimensioning, basic tolerancing and pictorial drawings.

DDT131 Machine Drafting Basics (1/2/3)

Prerequisite: As required by program.

This course in machine drafting and design provides instruction in the largest specialty area of drafting in the United States, in terms of scope and job opportunities. Emphasis will be placed on the applications of multi-view drawings, including drawing organization and content, title blocks and parts lists, assembly drawings, detail drawings, dimensioning and application of engineering controls in producing industrial type working drawings. Upon completion, students should be able to organize, layout, and produce industrial type working drawings, including the application of title blocks, parts lists, assemblies, details, dimensions, and engineering controls.

DDT132 Architectural Drafting (1/2/3)

Prerequisite: As required by program.

This course in architectural design and drafting introduces basic terminology, concepts and principles of architectural design and drawing. Topics include design considerations, lettering, terminology, site plans, and construction drawings. Upon completion, students should be able to draw, dimension, and specify basic residential architectural construction drawings.

DDT144 Basic 3D Modeling (1/2/3)

Prerequisite: As required by program.

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 the 3D world and have a "design intent" plan for each part in which they will design. Upon completion of the course students should be able to create basic 3D models and 2D working drawings.

DDT150 Theory of Residential Drawing/Design (3/0/3)

Prerequisite: As required by program.

This course provides the theory of residential drawing and design. Topics include architectural styles, house design, site and space planning, environment, drawing requirements, construction materials and process, terminology, and specific types of drawings required to complete a full set of construction documents. Introductory and intermediate level topics are covered. Emphasis is placed on an understanding of the various issues and requirements essential to the field of residential drawing and design.

DDT155 Drawing for Residential Construction (0/4/4)

Prerequisite: As required by program.

This course is an applications lab for the theory of residential drawing and design. Topics include house design, site and space planning, construction materials and process, terminology, and specific types of drawings required to complete a set of construction documents. Introductory and intermediate level topics are covered. Upon completion, students should be able to produce drawings to convey the various issues and requirements essential to the field of residential drawing and design.

DDT181 Special Topics in Drafting/Design (1/2/3)

Prerequisite: As required by program.

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

DDT213 Civil Drafting Plat Maps (1/2/3)

Prerequisite: As required by program.

This course introduces the drafting practices, symbols, conventions, and standards utilized in civil engineering contract documents. Topics include site planning, land surveying, topographic surveys, along with civil terminology. Upon completion, students should be able to draw accurate plat maps giving legal descriptions of land parcels, draw simple site plans, and identify and use proper symbols and conventions on civil engineering drawings.

DDT216 Design of Structural Wood Members (1/2/3)

Prerequisite: As required by program.

This course provides theory for structural wood members. Joists, beams, girders, rafters, posts, and columns are designed as related to residential and light commercial needs. Bending moment, shear, and slenderness ratios are discussed as well as code requirements.

DDT 220 Advanced Technical Drawing (1/2/3)

Prerequisite: As required by program.

This course covers the methods of providing size description and manufacturing information for production drawings. Emphasis will be placed on accepted dimensioning and tolerancing practices including Geometric Dimensioning and Tolerancing for both the ANSI and the ISO System. Upon completion, students should be able to apply dimensions, tolerances, and notes to drawings to acceptable standards, including Geometric Dimensioning and Tolerancing, and produce drawings using and specifying common threads and various fasteners, including welding methods.

DDT222 Advanced Architectural Drafting (1/2/3)

Prerequisite: As required by program.

This third course in architectural design and drafting continues with advanced architectural plans, including a slant toward light commercial construction. Topics include climate control plans, application of building codes, building materials and finish specifications, cost estimating, and bid specifications. Upon completion, students should be able to apply current techniques in producing advanced-level architectural plans, including residential and light commercial applications.

DDT233 Intermediate 3D Modeling (1/2/3)

Prerequisite: As required by program.

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.

DDT260 Portfolio (1/2/3)

Prerequisite: As required by program.

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.

Electrical Technology

ELT108 DC Fundamentals (1/2/3)

Prerequisite: As required by program.

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/tag out procedures, troubleshoot circuits and analyze series, parallel, and combination DC circuits using

the electrical laws and basic testing of equipment to determine unknown electrical quantities. CORE

ELT109 AC Fundamentals (1/2/3)

Prerequisite: As required by program.

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. CORE

ELT110 Wiring Methods (1/2/3)

Prerequisite: As required by program.

This course is a study of various tasks, wiring methods, materials, and associated NEC requirements that students will be required to work with in residential and commercial wiring course. CORE

ELT116 Residential Wiring (4/2/6)

Prerequisite: As required by program.

This course is a study of residential wiring practices and methods, the NEC requirements and residential blueprint interpretations.

ELT117 AC/DC Machines (1/2/3)

Prerequisite: As required by program.

This course covers the theory and operation of DC motors single and three phase AC motors and the labs will reinforce this knowledge. Emphasis is placed on the various types of single and three phase motors, wiring diagrams, starting devices, and practical application in the lab. CORE

ELT118 Commercial/Industrial Wiring I (1/2/3)

Prerequisite: As required by program.

This course focuses on principles and applications of commercial and industrial wiring. Topics include electrical safety practices, and 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. CORE

ELT 122 Advanced AC/DC Machines (2/1/3)

Prerequisite: As required by program.

This course focuses on single and three-phase motors and introduces students to DC motors. Emphasis is placed on field wiring, various types of AC and DC motors, troubleshooting procedures, and utilization of test equipment. Upon completion, students should be able to

explain, wire troubleshoot and test all types of AC and DC electric motors.

ELT209 Motor Controls I (1/2/3)

Prerequisite: As required by program.

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. CORE

ELT212 Motor Control II (2/1/3)

Prerequisite: As required by program.

This course covers complex ladder diagrams of motor control circuits and the uses of different motor starting techniques. Topics include wye-delta starting, part start winding, resistor starting and electronic starting devices. Upon completion, the students should be able to understand and interpret the more complex motor control diagrams and understand the different starting techniques of electrical motors.

ELT230 Programmable Controls (4/2/6)

Prerequisite: As required by program.

This course includes 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.

ELT241 National Electric Code (3/0/3)

Prerequisite: As required by program.

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.

ELT242 Journeyman-Master Prep Exam (3/0/3)

Prerequisite: As required by program.

This course is designed to help prepare a student to take either the Journeyman or Master Certification Exam. Emphasis is placed on review of electrical concepts and/or principals, practice tests, and test taking procedures. Upon

completion, students should be able to pass the Journeyman/Masters Certifying Exam.

ELT244 Conduit Bending and Installation (2/1/3)

Prerequisite: As required by program

This course provides students the knowledge to properly bend electrical metallic tubing, rigid galvanized and intermediate metal conduit, and PVC conduit. Emphasis is placed on the theory and practical application of conduit bending methods. Upon completion, students should be able to measure, layout, and successfully bend conduit using hand, mechanical, and hydraulic benders.

ELT245 Electrical Grounding Systems (3/0/3)

Prerequisite: As required by program.

This course provides the knowledge to understand how to properly ground an electrical system. Emphasis is placed on, but not limited to the following: residential installations, commercial installations, and the function of independent grounding elements. Upon completion, the students should be able to explain and design a simple grounding system.

English

ENG100 Vocational Technical English (3/0/3)

Prerequisite: As required by program.

This course is designed to enhance reading and writing skills for the workplace. Emphasis is placed on technical reading, job-related vocabulary, sentence writing, punctuation, and spelling with substantial focus on occupational performance requirements. Upon completion, students should be able to identify main ideas with supporting details and produce mechanically correct short writings appropriate to the workplace.

Horticulture

HOC111 Horticultural Business Management (1/2/3)

Prerequisite: As required by program

This course provides the essential information needed to establish and maintain a horticulture related business. Topics of discussion in this course will include the basic principles of business and personnel management, custom services, insurance, and record keeping. The student will develop an understanding of the requirements placed on the manager of a small business to comply with mandated state and federal regulations and meet consumer demands.

HOC115 Soils & Fertilizers (2/1/3)

Prerequisite: As required by program

This course provides students with an overview of methodologies to improve soil through preventing erosion, pH balance, and the proper use of nutrients and fertilizers. Specifically, students will learn the characteristics of soils, methods to control soil erosion, methods to modify soil, how to test and modify soil pH, and how to provide nutrients through fertilizers and other means to improve

plant growth. This course supports CIP code 01.0601 and 01.0605.

HOC120 Plant Propagation (2/1/3)

Prerequisite: As required by program

This course is designed to provide students with basic knowledge related to sexual and asexual plant propagation. At the conclusion of this course students will be able to use various techniques to propagate plants through seeds and asexual means such as budding, cutting, and grafting.

HOC125 Turf Management (2/1/3)

Prerequisite: As required by program

This course is the study of all major southern lawn and sport grasses, their establishment and maintenance. Topics include turf equipment, fertilizers, insect and disease problems, and mowing techniques. Upon course completion, students will be able to evaluate the quality of an existing turf area and prescribe a maintenance program for turf used for lawns, playing fields and parks.

HOC130 Nursery Production (1/2/3)

Prerequisite: As required by program

This course focuses on producing plants in a nursery. Topics include an overview of the industry, facility design, container production, and field growth. Upon course completion, students will be able to demonstrate proficiency in all phases of nursery plant production.

HOC134 Introduction to Floriculture (1/1/2)

Prerequisite: As required by program

This course introduces students to principles of floral design and flower shop management. Topics include design techniques, marketing, and management practices. Upon completion, students should be able to create basic floral designs and demonstrate an understanding of effective flower shop management practices.

HOC135 Ornamental Plant Identification (1/2/3)

Prerequisite: As required by program

This course focuses on the identification and growth requirements of ornamental plants. Topics include identification, habits of growth, cultural requirements, and landscape use of ornamental plants of the southeastern United States. Upon course completion, students will know common and botanical names of landscape plants and will know the appropriate use of each plant.

HOC136 Residential Landscape Design (1/2/3)

Prerequisite: As required by program

This course provides an overview of the fundamentals of residential site design. Topics include site measuring and base map preparation, functional diagrams, landscape design principles, drafting and drawing procedures, design principles, appropriate use of plant materials, planting, site preparation, and spatial composition. Upon course completion, students will be able to develop a master plan for a residential property.

HOC137 Commercial Landscape Design (1/2/3)

Prerequisite: As required by program

This course is a study of landscape design principles, drafting and drawing procedures, and the use of plant materials. Emphasis is placed on drawing techniques and the appropriate use of plant materials in the commercial setting. Lab time is provided for the student to develop landscape drawings.

HOC140 Pest Management (3/0/3)

Prerequisite: As required by program

This course provides students with foundational knowledge of techniques to manage various types of pests commonly associated with landscape management and horticulture. Students receive instruction on managing common weeds, insects, and diseases.

HOC151 Irrigation Systems (1/1/2)

Prerequisite: As required by program

This course is designed to provide students with the information needed to design, layout, and install an irrigation system on residential and commercial properties. Topics of discussion will include system design, cost estimating, installation techniques, and electronic control devices. Upon course completion, students will be able to design and install residential and commercial irrigation systems.

HOC167 Golf Course Maintenance (2/1/3)

Prerequisite: As required by program

This course introduces students to procedures commonly used to maintain golf course greens and fairways. Topics include mowing procedures, fertilizing, watering, pest control, overseeding, and greens protection. Upon course completion, students will be able to demonstrate appropriate greens and fairway maintenance procedures.

HOC175 Seminar in Horticulture (1/0/1)

Prerequisite: As required by program

This course focuses on current topics in horticulture. Topics are not normally included in the prescribed course of study but are to ensure that students remain current in the field.

HOC176 Advanced Studies in Horticulture (0/2/2)

Prerequisite: As required by program

This course allows students to do practical research and develop a project of special interest under the guidance and supervision of a faculty member. Students and faculty confer in the selection of a project and in identification of objectives.

HOC210 Greenhouse Management (1/2/3)

Prerequisite: As required by program

This is an introductory course in greenhouse plant production. Topics include types of structures, construction techniques, covering materials, and temperature control. Upon course completion, students will be able to apply basic greenhouse production procedures.

HOC211 Greenhouse Crop Production (1/2/3)

Prerequisite: As required by program

This is an introductory course to the use of greenhouse facilities for the production of foliage and flowering plant crops. Topics include propagation, scheduling, soils and media, crop selection, pest management, and methods of production. Upon course completion, students will be able to produce a wide range of commercial greenhouse crops.

HOC216 Landscape Maintenance (2/1/3)

Prerequisite: As required by program

This course focuses on maintaining plant materials and turf in an existing landscape. Topics include pruning, mowing techniques, pest management and selection of maintenance equipment. Upon completion, students will be able to demonstrate landscape maintenance techniques and will be able to prepare labor-time estimates and cost analysis for maintaining landscapes.

HOC218 Landscape Construction (2/1/3)

Prerequisite: As required by program

This course is an introduction to landscape construction. Emphasis is placed on grading and drainage, site development, irrigation systems, lighting, and other landscape construction. Upon course completion, students will be able to evaluate a blueprint and reconcile it to the job site.

HOC230 Vegetable and Orchard Crops (1/2/3)

Prerequisite: As required by program

This course focuses on vegetable and fruit crops. Topics include cultural requirements, production procedures, and marketing. Upon course completion, students should be able to grow vegetables and establish orchard lay-outs.

HVAC

ASC111 Principles of Refrigeration (1/2/3)

Prerequisite: As required by program.

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 be able to 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. CORE

ASC112 HVACR Service Procedures (1/2/3)

Prerequisite: As required by program.

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.

ASC113 Refrigeration Piping Practices (1/2/3)

Prerequisite: As required by program.

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. CORE

ASC119 Fundamentals of Gas Heating Systems (1/2/3)

Prerequisite: As required by program.

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.

ASC120 Fundamentals of Electric Heat Systems (1/2/3)

Prerequisite: As required by program.

This course covers the fundamentals of electric furnace systems. Emphasis is placed on components, general service procedures, and basic installation. On completion, students should be able to install and service electric furnaces, heat pumps, and solar and hydronic systems.

ASC121 Principles of Electricity for HVACR (1/2/3)

Prerequisite: As required by program.

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. CORE

ASC122 HVACR Electric Circuits (1/2/3)

Prerequisite: As required by program.

This course introduces the student to electrical circuits and diagrams. Electrical symbols and basic wiring diagrams are constructed in this course. Upon completion, students should understand standard wiring diagrams and symbols and be able to construct various types of electrical circuits. CORE

ASC123 HVAC/R Electrical Components (1/2/3)

Prerequisite: As required by program.

This course introduces students to electrical components and controls. Emphasis is placed on the operations of motors, relays, contactors, starters, and other HVAC electrical components. Upon completion, students should be able to install electrical components and determine their proper operation. CORE

ASC125 Fund. of Gas/Electric Heat Systems (2/4/6)

Prerequisite: As required by program.

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 ASC 119 and 120.

ASC127 HVACR Electric Motors (1/2/3)

Prerequisite: As required by program.

This course covers the basic maintenance of electric motors used in HVAC/R systems. Topics include types of motors, motor operations, motor installation, and troubleshooting motors. Upon completion, students should be able to install and service HVAC/R electric motors.

ASC128 Heat Load Calculations (3/0/3)

Prerequisite: As required by program.

This course focuses on heat flow into and out of building structures. Emphasis is placed on determining heat gain/heat loss of a given structure. Upon completion, students should be able to calculate heat load and determine HVAC equipment size requirements.

ASC132 Residential Air Conditioning (1/2/3)

Prerequisite: As required by program.

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 should be able to service and repair residential air conditioning systems.

ASC138 Customer Relations in HVAC (3/0/3)

Prerequisite: As required by program.

This course covers the basic aspects of customer relations needed by the HVAC technician. Topics include employability skills associated with job performance, record keeping, service invoices, certification requirement, local ordinances, and business ethics. Upon completion, students should be able to get a job and keep it.

ASC147 Refrigerant Transition/Recovery Theory (3/0/3)

Prerequisite: As required by program.

This course is EPA-approved and covers material relating to the requirements necessary for type I, II, and III universal certification. Upon completion, students should be prepared to take the EPA 608 certification examination.

ASC152 Heat Pump Systems (2/4/6)

Prerequisite: As required by program.

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.

ASC181 Special Topics in AC/Refrigeration I (3/0/3)

Prerequisite: As required by program.

This course provides specialized instruction in various areas related to the air conditioning and refrigeration industry.

ASC182 Special Topics in AC/Refrigeration II (0/3/3)

Prerequisite: As required by program.

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.

ASC185 Special Topics in AC/Refrigeration (2/0/2)

Prerequisite: As required by program.

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.

ASC210 Troubleshooting HVACR systems (1/2/3)

Prerequisite: As required by program.

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.

Industrial Maintenance Technology

INT100 Mathematics for Industrial Technicians (3/0/3)

Prerequisite: As required by program

This course is designed to provide an understanding of basic mathematical concepts used in an industrial setting. Topics include the arithmetic of whole numbers, fractions, and decimals; basic ration, proportion, and percentage; application problems in industrial maintenance.

INT101 DC Fundamentals (2/1/3)

Prerequisite: As required by program

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. CORE

INT103 AC Fundamentals**(2/1/3)***Prerequisite: As required by program*

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. CORE

INT105 Introduction to Process Technology**(2/1/3)***Prerequisite: As required by program*

This course is designed to provide students with an introduction to process control technology and various instruments used to control processes. Upon completion, students should be able to comprehend principles of process control technology and the application of various instruments used to control processes in an industrial setting.

INT106 Elements of Industrial Mechanics**(2/1/3)***Prerequisite: As required by program*

This course provides instruction in basic physics concepts applicable to industrial mechanics. Topics include mechanical principles with emphasis placed on power transmission and specific mechanical components. Upon course completion, students will be able to apply principles relative to mechanical tools, fasteners, basic mechanics, lubrication, bearings, packing and seals.

INT109 Components of Material Handling**(2/1/3)***Prerequisite: As required by program*

This course focuses on the different modes of handling manufactured goods or products. Topics include the installation, operation, and maintenance of the material handling process components. Emphasis is placed on determining control limits, performing scheduled maintenance, and troubleshooting performance or function failures. Upon completion, students should be able to install, operate, monitor, maintain and troubleshoot a simulated material handling system.

INT110 Automated Material Handling**(2/1/3)***Prerequisite: As required by program*

This course focuses on the automatic function and control of different modes of handling manufactured goods or products. Topics include the development of a simulated condition of control parameters within the material handling process, determining control limits, and performing root cause analysis. Upon completion, students

should be able to write start-up and shut-down procedures, operate, monitor, and control plant material handling systems at the system wide level.

INT112 Industrial Maintenance Safety Procedures**(3/0/3)***Prerequisite: As required by program*

This course is an in-depth study of the health and safety practices required for maintenance of industrial production equipment. Topics include traffic, ladder, electrical, and fire safety, safe work in confined spaces, electrical and mechanical lock-out procedures, emergency procedures, OSHA regulations, MSDS Right-to-Know law, hazardous materials safety, and safety equipment use and care. Upon course completion, students will be able to implement health and safety practices in an industrial production setting.

INT113 Industrial Motor Controls I**(1/2/3)***Prerequisite: As required by program*

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.

INT117 Principles of Industrial Mechanics**(2/1/3)***Prerequisite: As required by program*

This course provides instruction in basic physics concepts applicable to mechanics of industrial production equipment. Topics include basic application of mechanical principles with emphasis on power transmission, specific mechanical components, alignment, and tension. Upon completion, students will be able to perform basic troubleshooting, repair and maintenance functions on industrial production equipment. CORE

INT118 Fund. Ind. Hydraulics/Pneumatics**(2/1/3)***Prerequisite: As required by program*

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. CORE

INT121 Industrial Hydraulics Troubleshooting**(1/2/3)***Prerequisite: As required by program*

This course provides instruction in maintenance and troubleshooting procedures needed for safe and proper repair of hydraulic systems used with industrial production equipment. Topics include maintenance and troubleshooting procedures, hydraulic system maintenance and troubleshooting techniques, effects of heat, leakage, and contamination on components and system operation, component maintenance and troubleshooting, reading and interpreting system diagrams, and design and troubleshooting of hydraulic circuits and systems. Upon course completion, students will demonstrate the ability to troubleshoot and repair industrial hydraulic systems.

INT127 Principles of Ind. Pump/Piping Systems (2/1/3)

Prerequisite: As required by program

This course provides instruction in the fundamental concepts of industrial pumps and piping systems. Topics include pump identification, operation, and installation, maintenance and troubleshooting, and piping systems, and their installation. Upon course completion, students will be able to install, maintain, and troubleshoot industrial pumps and piping systems.

INT134 Principles of Ind. Maintenance Welding (2/1/3)

Prerequisite: As required by program

This course provides instruction in the fundamentals of acetylene cutting and the basics of welding needed for the maintenance and repair of industrial production equipment. Topics include oxy-fuel safety, choice of cutting equipment, proper cutting angles, equipment setup, cutting plate and pipe, hand tools, types of metal welding machines, rod and welding joints, and common welding passes and beads. Upon course completion, students will demonstrate the ability to perform metal welding and cutting techniques necessary for repairing and maintaining industrial equipment. CORE

INT161 Blueprint Reading/Ind. Technicians (3/0/3)

Prerequisite: As required by program

This course is designed to provide the student 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.

INT184 Intro to Programmable Logic Controllers (2/1/3)

Prerequisite: As required by program

This course introduces 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.

INT253 Industrial Robotics (2/1/3)

Prerequisite: As required by program

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.

Logistics & Supply Chain Technology

LGT106 Workplace Essentials (3/0/3)

Prerequisite: As required by program

This course emphasizes the foundational information to develop knowledge and skills to prepare individuals for employment following completion of technical and academic programs. At the conclusion of this course, students will have knowledge and skills relevant to work ethic, communication, resume writing, job interviewing, dress and appearance, behavior, problem solving, decision making, and project management.

LGT108 Introduction to Logistics (3/0/3)

Prerequisite: As required by program

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.

LGT110 Warehouse Operations I (2/1/3)

Prerequisite: As required by program

This course provides students with introductory information relative to safety and common logistics operational concepts such as warehouse management system: principles of warehousing to include warehouse design: shipping, receiving and distribution of goods: inventory tracking; storage; handling; material handling equipment.

LGT111 Warehouse Operations II (2/1/3)

Prerequisite: As required by program

This course is a continuation of information and skills gained in Warehouse Operations I. Students gain additional information on topics such as: in-house transportation, local application forklift operations, consolidation, and packing.

LGT114 Supply Chain Fundamentals/Mgmt. (3/0/3)

Prerequisite: As required by program

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.

LGT115 Purchasing in Logistics (3/0/3)

Prerequisite: As required by program

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.

LGT117 Survey of Automated Logistics Systems (3/0/3)

Prerequisite: As required by program

This course provides a survey of automated systems used in many logistics and supply chain management applications. Instruction will focus on similarities and differences of automated systems conventions. Upon successful completion of this course students will be familiar with how automated systems support logistics management applications.

LGT120 Materials Management (3/0/3)

Prerequisite: As required by program

This course will introduce students to materials management by learning planning production processes, master scheduling, material requirements, and forecasting material demands and inventory levels. This course is designed to build on the students' knowledge of supply chains and how effective material management improves supply chain performance.

LGT127 Logistics and Regulatory Compliance (3/0/3)

Prerequisite: As required by program

This course provides students with knowledge of international, national, state and local regulations impacting on various aspects of managing logistics and supply chains. Topics include trade compliance, standard shipping documents, harmonized commodity description and coding system, and the role of participating government agencies. At the conclusion of this course students will comprehend key elements of logistics regulatory compliance.

LGT132 Physical Distribution Systems (3/0/3)

Prerequisite: As required by program

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.

LGT137 Warehouse and Inventory Management (2/1/3)

Prerequisite: As required by program

This course provides students with information on the efficient and effective operation of warehouse operations. Emphasis is placed on the management of warehouse operation and its relationship with supply chain management.

LGT210 Quality Improvement/SC Management (3/0/3)

Prerequisite: As required by program

This course provides basic knowledge and skills with quality improvement processes. Emphasis is placed on analysis of processes to locate potential or actual problems associated with supply chain management.

LGT210 Quality Improvement/SC Management (3/0/3)

Prerequisite: As required by program

LGT271 Supply Chain Analytics (3/0/3)

Prerequisite: As required by program

This course introduces 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.

Marine Technology

MRT101 Marine Engines and Drives (2/1/3)

Prerequisite: As required by program

Students will be introduced to professional work standards; shop safety; and the proper use of hand, measuring and precision tools. Students will learn the fundamentals of engine repair and operation for the internal combustion engine, including two-stroke and four-stroke operations. Also covered will be the lubrication, cooling and exhaust systems as well as the differences between outboard and sterndrive systems. Students will learn to perform the steps required to diagnose and service marine engines with mechanical-related concerns.

MRT108 Marine Rigging and Trailers (1/2/3)

Students will learn to perform procedures for rigging outboard motors, aligning sterndrive engines, instrument gauge installation and electrical hookup, remote control, and predelivery adjustments. The importance of rigging, as it relates to customer satisfaction, will be emphasized. Students also will perform setup, installation and maintenance procedures for common optional equipment, including trailers, trolling motors and depth finders. Introduction to the use of trailers, trailer adjustments, wheel bearings maintenance, lighting (LED/incandescent) and vehicle connectors.

MRT111 Service Operations / Customer Service (3/0/3)

Students will become familiar with various service department job functions with dealerships of major manufacturers, including Honda Marine, Mercury Marine, MerCruiser, Suzuki, Volvo, Penta BRP, and Yamaha. They will learn how the technician functions in the dealership in dealing with parts, inventory, warranties, repair orders, technical bulletins, flat rates and service manuals. Students will use hands-on approaches to learn the importance of the various roles in these areas. They will be required to demonstrate knowledge and abilities through written tests and the use of unique training workstations that utilize manufacturers' computer software.

MRT114 Fuel and Lubrication Systems (2/1/3)

Students will learn to identify carburetor and EFI fuel systems on various outboards and sterndrives. They will gain hands-on experience in diagnosing minor fuel system problems, rebuilding carburetors, and performing basic synchronization adjustments on various fuel system configurations. In addition, injector cleaning, replacement, fuel pressure and filters for outboards, inboards, jet and sterndrive applications will be discussed. Upon completion of this course, students will be familiar with procedures to diagnose, troubleshoot, and repair various fuel systems with special attention to carburetors, EFI systems, and diagnostic tools. Various types of oils and lubricant rating systems used in the marine industry are covered, as well as troubleshooting and repairing different types of lubrication systems.

MRT124 Electrical Systems & Diagnostics (2/2/4)

Students will diagnose minor electrical problems within the ignition, charging, starting, warning, engine management, lighting, and accessory systems (e.g., GPS, depth gauge, trolling motors trailer, stereo, NEMA, sump pump, etc.). Engine management electronics includes control computer, sensors, diagnostic equipment, instruments and ignition systems. Documentation to include manufacturers' schematics and new equipment assembly instructions. They will expand their basic knowledge of electrical systems, with an emphasis on problem diagnostics of both newer technical systems and unique older systems.

MRT175 Basic Hydraulics (3/1/4)

This course provides the student with a study of force and energy, pumps, actuators, control valves, flow valves, pressure valves, reservoirs, coolers, filters, motors, symbols, and print reading. Emphasis is placed on troubleshooting and maintaining hydraulic systems. Upon completion, students will understand basic hydraulic principles, how to troubleshoot hydraulic systems, and how to maintain hydraulic components.

MRT200 Marine Engines & Outboard Drives (1/2/3)

Students will be introduced to professional work standards, shop safety; and the proper use of hand tools, measuring, precision instruments and diagnostic devices for outboard engines and drive systems. Students will learn the fundamentals of engine operation and repair for the internal combustion engine, including two-stroke and four-stroke operations. Also covered will be the lubrication, cooling, ignition, fuel delivery and exhaust systems. Students will learn to perform the steps required to diagnose and service marine engines with electro-mechanical-related concerns.

MRT220 Marine Engines & Stern Drives (1/2/3)

Students will be introduced to professional work standards; shop safety; and the proper use of hand tools, measuring, precision instruments and diagnostic devices for stern drive engines and drive systems. Students will learn the fundamentals of engine operation and repair for the

internal combustion engine. Also covered will be the lubrication, cooling, ignition, fuel delivery and exhaust systems. Students will learn to perform the steps required to diagnose and service marine engines with electromechanical-related concerns.

Masonry

MAS111 Masonry Fundamentals (2/1/3)

Prerequisite: As required by program

This course is designed as an introduction and orientation to masonry construction, specifically to brick and block construction. Topics include the identification and safe use of tools, equipment, and masonry materials. Upon completion, the students should have a general knowledge of masonry. CORE

MAS121 Brick/Block Masonry Fundamentals (1/2/3)

Prerequisite: As required by program

This course is designed to provide the student with basic fundamental skills for working with brick and block. Emphasis is placed on the importance of proper work site set up, dry bonding, head and bed joints, leveling, plumbing, and straight edging. Upon completion, students should have requisite skills meeting entry level standards. CORE.

MAS131 Brick/Block Masonry Fundamentals II (1/2/3)

Prerequisite: As required by program

This course is designed to provide the student with a working knowledge of laying bricks and blocks. Emphasis is placed on set up, layout, building corners, and laying to the line. Upon completion, students should have entry level skills in brick and block masonry. CORE

MAS151 Brick/Block Masonry Fundamentals III (1/2/3)

Prerequisite: As required by program

This course is designed to provide the student with a working knowledge of the various methods of laying bricks and blocks. Emphasis is placed on hanging a speed pole, layout, building corners, and laying to a line. Upon completion, the students should have entry level skills in basic bonds, tooling and finishing joints, toothing corners, and cutting masonry units. CORE.

MAS161 Block Masonry Lab (0/3/3)

Prerequisite: As required by program

This course provides practical application of block laying techniques. Emphasis is placed on developing skill in laying block, constructing and reinforcing walls, joints, and sample panels. Upon completion, the student should be able to construct block walls to entry-level standards. CORE.

MAS162 Brick Masonry Lab (0/3/3)

Prerequisite: As required by program

This course provides practical application of advanced brick laying techniques. Emphasis is placed on developing skill in laying brick, constructing and reinforcing walls, joints, and

sample panels and prisms. Upon completion, the student should be able to construct brick walls to entry-level standards. CORE.

MAS171 Residential/ Commercial Masonry (1/2/3)

Prerequisite: As required by program

This course provides application of residential and commercial techniques for reading plans, estimating costs, and constructing composite walls. Emphasis is placed on estimating material and labor cost based on specifications contained in working drawings or blueprints and on bonding composite walls. Upon completion, the student should be able to demonstrate entry level skills in print reading and cost estimation as well as composite wall construction and bonding. CORE.

MAS181 Special Topics in Masonry (1/2/3)

Prerequisite: As required by program

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

MAS211 Stone Masonry (1/2/3)

Prerequisite: As required by program

This course introduces stone and decorative masonry techniques, fireplace construction, and repair and restoration of brick structures. Topics include brick arches, fireplace construction, stone materials, laying techniques, moisture control, wall supports, joints, coping sample panels, and cultured stone. Upon completion, the student should be able to identify appropriate materials and techniques for the stated topics.

MAS221 Specialized Masonry (1/2/3)

Prerequisite: As required by program

This course introduces geographically specific masonry techniques. Topics include panel construction, acid brick, refractories, structural glazed tile, glass block, passive solar design, barrier walls and hollow metal frames. Upon completion, students should be able to define and recognize types and applications of specialized techniques and materials as well as identify proper installation and laying techniques.

MAS231 Basic Cement Masonry (1/2/3)

Prerequisite: As required by program

This course is designed to introduce the various types of cement masonry, concrete requirements, flat work, estimating, and finishing methods. Emphasis is placed on estimating concrete for small to medium size projects, flat work, form work, footings, and the correct tools and methods of finishing and placing.

MAS251 Stone Masonry Lab (0/3/3)

Prerequisite: As required by program

This course provides practical application of stone and decorative masonry techniques, repair and restoration of brick structures, and brick arches. Emphasis is placed on developing skills in performing these techniques. Upon

completion, the student should be able to lay stone, repair and restore brick structures, and build brick arches to entry-level standards.

MAS252 Fireplace Construction (0/3/3)

Prerequisite: As required by program

This course provides practical application of techniques for constructing fireplaces and other decorative work. Emphasis is placed on developing skill in constructing decorative masonry techniques. Upon completion, the student should be able to construct a variety of fireplaces to entry-level standards.

MAS253 Brick Arches Lab (0/3/3)

Prerequisite: As required by program

This course provides practical application of techniques of constructing brick arches and other decorative work. Emphasis is placed on developing skill in constructing decorative masonry techniques. Upon completion, the student should be able to construct brick arches and other decorative masonry techniques to entry-level standards.

MAS261 Specialized Masonry (0/3/3)

Prerequisite: As required by program

This course provides practical application of geographically specific masonry techniques. Emphasis is placed on developing skill in laying and installing panel construction, acid brick, refractories, structural glazed tile, glass block, passive solar design, barrier walls, and hollow metal frames. Upon completion, students should be able to perform, to entry-level standards, appropriate techniques for selection, laying, and installation of geographically specific masonry applications.

MAS 271 Basic Cement Masonry Lab (0/3/3)

Prerequisite: As required by program

This course introduces basic concrete masonry, including the use of various tools, estimating, and placing concrete. Emphasis is placed on correct methods used in placing concrete, finishing concrete, placing forms, and proper care of concrete tools. Upon completion of this course, the student should demonstrate entry-level skills for placing, finishing, estimating, and curing concrete.

MAS272 Advanced Cement Masonry (0/3/3)

Prerequisite: As required by program

This course continues skill building in concrete masonry. Emphasis is placed on correct methods used in placing concrete, finishing concrete, placing forms, and maintenance of concrete tools. Upon completion of this course, the student should be able to demonstrate increased speed and accuracy in building structures covered in this course.

MAS282 Special Topics in Masonry (0/3/3)

Prerequisite: As required by program

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

Mathematics

MAH 101 Introductory Mathematics I (3/0/3)

Prerequisite: As required by program

This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include business and industry related arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific occupational areas of study. NCA

Office Administration

SET101 Beginning Keyboarding (3/0/3)

Prerequisite: As required by program

This course is designed to enable the student to use the touch method of keyboarding. Emphasis is on speed and accuracy in keying alphabetic, symbols, and numeric information using the typewriter or microcomputer keyboard. Upon completion, the student should be able to demonstrate proper techniques and acceptable rate of speed and accuracy, as defined by the course syllabus, in the production of basic business documents such as memos, letter, reports, and tables. CORE.

SET104 Advanced Keyboarding (3/0/3)

Prerequisite: As required by program

This course is designed to assist the student in continuing to develop speed and accuracy using the touch method of keyboarding. Emphasis is on the production of business documents using decision-making skills. Upon completion, the student should be able to demonstrate proficiency and an acceptable rate of speed and accuracy in the production of business documents.

SET125 Basic Word Processing (3/0/3)

Prerequisite: As required by program

This course is designed to provide the student with basic word processing skills. Emphasis is on the utilization of software features to create, edit and print common office documents. Upon completion, the student should be able to demonstrate the ability to use industry-standard software to generate appropriately formatted, accurate, and attractive business documents such as memoranda, letters and reports. CORE

SET126 Advanced Word Processing (3/0/3)

Prerequisite: As required by program

This course is designed to increase student proficiency in using advanced word processing functions. Emphasis is on the use of industry-standard software to maximize productivity. Upon completion, the student should be able to demonstrate the ability to generate complex documents such as forms, newsletters, and multi-page documents.

SET133 Business Communications (3/0/3)

Prerequisite: As required by program

This course is designed to provide the student with skills necessary to communicate effectively. Emphasis is on the application of communication principles to produce clear, correct, logically organized business communications. Upon completion, the student should be able to demonstrate effective communication techniques in written, oral and nonverbal communications.

SET134 Career and Professional Development (3/0/3)

Prerequisite: As required by program

This course is designed to assist the student in preparing for employment. Emphasis is on developing resumes, improving interview techniques, participating in mock interviews, setting goals, conducting job searches and improving personal and professional image. Upon completion, the student will be able to demonstrate confidence in seeking employment.

SET135 Financial Record Keeping (3/0/3)

Prerequisite: As required by program

This course is designed to provide the student with an understanding of accounting concepts, principles, and terminology. Emphasis is on the accounting cycle and equation as they relate to different types of business ownership. Upon completion, the student should be able to demonstrate accounting procedures used in a proprietorship, partnership, and corporation.

SET138 Records and Information Management (3/0/3)

Prerequisite: As required by program

This course is designed to give the student knowledge about managing office records and information. Emphasis is on basic filing procedures, methods, systems, supplies, equipment, and modern technology used in the creation, protection, and disposition of records stored in a variety of forms. Upon completion, the student should be able to perform basic filing procedures.

SET218 Office Procedures (3/0/3)

Prerequisite: As required by program

This course is designed to develop an awareness of the responsibilities and opportunities of the office professional. Emphasis is on current operating functions, practices and procedures, work habits, attitudes, oral and written communications, and professionalism. Upon completion, the student should be able to demonstrate the ability to effectively function in an office support role.

SET230 Computerized Desktop (3/0/3)

Prerequisite: As required by program

This course is designed to introduce the students to the elements and techniques of page design, layout and typography. Emphasis is on the use of current commercial desktop publishing software, graphic tools, and electronic input/output devices to design and print high-quality publications such as newsletters, brochures, catalogs, forms, and flyers. Upon completion, the student should be

able to utilize proper layout and design concepts in the production of attractive desktop published documents.

SET231 Office Applications (3/0/3)

Prerequisite: As required by program

This course is designed to provide the student with a foundation in the use of computerized equipment and application software as tools in the performance of a variety of office tasks. Emphasis is on the role of the office professional in the selection and application of appropriate technology to the specific task or combination of tasks. Upon completion, the student should be able to demonstrate proficiency in the selection of appropriate computerized tools to complete designated tasks.

SET232 The Computerized Office (3/0/3)

Prerequisite: As required by program

This course is designed to enable the student to develop skill in the use of integrated software through classroom instruction and outside lab exercises. Emphasis is on the use of computerized equipment, software, and communications technology. Upon completion, the student should be able to satisfactorily perform a variety of office tasks using current technology.

SET243 Spreadsheet Applications (3/0/3)

Prerequisite: As required by program

This course provides the student with skills needed in performing spreadsheet tasks. Emphasis is on spreadsheet terminology and design, common formulas, proper file and disk management procedures. Upon completion, the student should be able to design, format, and graph effective spreadsheets.

SET244 Database Concepts (3/0/3)

Prerequisite: As required by program

This course is designed to provide the student with an understanding of the concepts of database management. Emphasis is on the use of database software for business applications. Upon completion, the student should be able to create and manipulate data files and format output as documents and reports.

SET245 Data Entry (3/0/3)

Prerequisite: As required by program

This course focuses on the use of computerized equipment and software in performing data entry tasks. Emphasis is on the basic features of data entry software, terminology, and proper file and disk management procedures. Upon completion, the student should be able to perform data entry applications.

SET246 Office Graphics and Presentations (3/0/3)

Prerequisite: As required by program

This course focuses on producing business slides and presentations. Emphasis is on software tools, presentation options, design and presentation considerations. Upon completion, the student should be able to design and produce a business presentation.

Orientation

ORT 100 Orientation for Career Students (1/0/1)

Prerequisite: As required by program

This course is designed to introduce the beginning student to college. College policies and regulations are covered as well as stress management, resume preparation, job application procedures, and employment interviewing techniques.

Plumbing

PLB111 Introduction to Plumbing (1/2/3)

Prerequisite: As required by program

This course covers fundamental plumbing principles, practices, and history. Topics include basic plumbing principles, safety, job seeking skills, blueprint reading, plumbers' math, shop orientation, and school policy. Upon completion, students will be able to seek employment, understand basic plumbing principles, read and interpret blueprints, work safely, and use formulas to solve plumbing problems involving measurement layouts. CORE NDC.

PLB112 Plumbing Applications (0/3/3)

Prerequisite: As required by program

Students perform various basic plumbing and pipefitting tasks. Safety and regulatory compliance is emphasized throughout this course. At the conclusion of this course students will be able to develop basic plumbing drawings and schematics, use hand and power tools, measure fittings, and join pipe with oxy-fuel equipment.

PLB113 Pipes and Fittings (1/2/3)

Prerequisite: As required by program

This course includes the theory of joining pipe and fittings. Topics include methods of joining pipe and fittings, selecting and using power tools, and methods of securing piping. Upon completion, students will be able to identify pipefitting, identify tools, properly care for tools and identify various types of pipe securing devices. CORE

PLB114 Joining Pipes and Fittings (0/3/3)

Prerequisite: As required by program

This course covers identifying pipe and fittings, proper methods for joining all types of pipe and fittings, hanging and securing pipe and using materials and tools. Emphasis is on all plumbing materials, tools, suppliers, equipment and methods. Upon completion, students will be able to join various pipe and fittings.

PLB115 Pressure & Non-Pressure Systems (1/2/3)

Prerequisite: As required by program

This course covers pressure and non-pressure systems including piping for potable water, drainage, waste, vent, gas, air, and water. Topics include types of plumbing systems, and system design and size. At the conclusion of this course students will be able to rough-in basic plumbing systems for pressure and non-pressure pipe systems. CORE

PLB116 Pressure/Non-Pressure Systems Apps (0/3/3)

Prerequisite: As required by program

Students perform various basic pressure and non-pressure pipe systems tasks. Safety and regulatory compliance is emphasized throughout this course. At the conclusion of this course students will be able to rough-in basic plumbing systems for pressure and non-pressure pipe systems.

PLB117 Plumbing Codes (1/2/3)

Prerequisite: As required by program

This course includes reading and interpreting international codes, local codes, and general regulations. Emphasis is on basic principles, definitions, materials, facility requirements, and technical review. Upon completion, students will be able to read and interpret applicable codes.

PLB118 Code Application (0/3/3)

Prerequisite: As required by program

This course is an application of PLB 117. Emphasis is on fixture unit value, sizing systems, minimum plumbing requirements and construction of pressure and non-pressure systems according to code. Upon completion, students will be able to calculate and construct pressure and non-pressure systems.

PLB119 Fund/Gas Piping Systems for Heating (0/3/3)

Prerequisite: As required by program

This course is an application of PLB 117. Emphasis is on fixture unit value, sizing systems, minimum plumbing requirements and construction of pressure and non-pressure systems according to code. Upon completion students will be able to calculate and construct pressure and non-pressure systems.

PLB121 Special Projects Plumbing Code II (0/1/1)

Prerequisite: As required by program

This course is a continuation of PLB 120. Emphasis will be given to application of fixture unit values, sizing systems and minimum plumbing requirements. Upon completion, the student will be able to calculate and construct pressure and non-pressure systems in accordance with state and local plumbing codes.

PLB122 Special Projects Gas Fitting (0/3/3)

Prerequisite: As required by program

This course covers the local and state codes governing the design and installation of natural gas piping and appliances that use natural gas. Emphasis will be placed on residential and commercial gas piping installation, appliance installation, and venting. Upon completion of this course, the student will be able to demonstrate his/her ability to interpret and apply the various codes governing the design and installation of gas piping and appliances.

PLB211 Plumbing Repair & Installation (3/0/3)

Prerequisite: As required by program

This course enables students to read/follow schematics/diagrams/rough-in sheets to install or repair plumbing fixtures, to troubleshoot and make repairs. Topics include

removing, replacing and repairing plumbing fixtures, new installations and troubleshooting. Upon completion, students will be able to make plumbing repairs and install plumbing fixtures.

PLB212 Plumbing Repair & Installation Lab (0/3/3)

Prerequisite: As required by program

This course is an application of PLB 211. Topics include repairing and installing plumbing fixtures and choosing appropriate fixtures for the job. Upon completion, students will be able to install new fixtures and remove, repair, and replace existing plumbing fixtures.

Speech

SPC 103 Oral Communication Skills (3/0/3)

Prerequisite: As required by program

This course introduces the basic concepts of interpersonal communication and the oral communication skills necessary to interact with co-workers and customers, and to work effectively in teams. Topics include overcoming barriers to effective communication, effective listening, applying the principles of persuasion, utilizing basic dynamics of group discussion, conflict resolution, and positive communication patterns in the business setting. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, develop a businesslike personality, and effectively present themselves before co-workers and the public.

Welding

WDT108 SMAW Fillet/OFC (2/1/3)

Prerequisite: As required by program

This course provides instruction on safety practices and terminology in the Shielded Metal Arc Welding (SMAW) process. This course also covers the basic safety and identification of shop equipment and provides the student with the skills and knowledge necessary for the safe operation of oxy-fuel cutting.

WDT109 SMAW Fillet/PAC/CAC (2/1/3)

Prerequisite: As required by program

This course provides 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 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.

WDT110 Industrial Blueprint Reading (3/0/3)

Prerequisite: As required by program

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.

WDT119 Gas Metal Arc/Flux Cored Arc Welding (2/1/3)

Prerequisite: As required by program

This course introduces the student to the gas metal arc and flux cored arc welding process. Emphasis is placed on safe operating practices, handling and storage of compressed gasses, process principles, component identification, various welding techniques and base and filler metal identification.

WDT120 Shielded Metal Arc Welding Groove (2/1/3)

Prerequisite: As required by program

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.

WDT122 SMAW Fillet/OFC Lab (0/3/3)

Prerequisite: As required by program

This course is designed to introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of oxyfuel cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-3 groups in accordance applicable welding code and be able to safely operate oxy-fuel equipment and perform those operations as per the applicable welding code.

WDT 123 SMAW Fillet/PAC/CAC Lab (0/3/3)

Prerequisite: As required by program

This course is designed to introduce the student to the proper set-up and operation of the shielded metal arc welding equipment. Emphasis is placed on striking and controlling the arc, and proper fit up of fillet joints. This course is also designed to instruct students in the safe operation of plasma arc and carbon arc cutting. Upon completion, students should be able to make fillet welds in all positions using electrodes in the F-4 groups in accordance with applicable welding code and be able to safely operate plasma arc and carbon arc equipment and perform those operations as per applicable welding code.

WDT124 GMAW/Flux Cored Arc Welding Lab (03/3)

Prerequisite: As required by program

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 gasses.

WDT125 SMAW Grooves Lab (0/3/3)

Prerequisite: As required by program

This course provides instruction and demonstrations in the shielded metal arc welding process on carbon steel plate with various size F3 and F4 group electrodes in all positions. Emphasis is placed on welding groove joints and using various F3 and F4 group electrodes in all positions. Upon completion, the student should be able to make visually acceptable groove weld joints in accordance with applicable welding codes.

WDT157 Consumable Welding Process (1/2/3)

Prerequisite: As required by program

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.

WDT158 Consumable Welding Processes Lab (0/3/3)

Prerequisite: As required by program

This course provides instruction and demonstration with the consumable welding processes to produce groove and fillet welds in all positions, according to applicable welding codes. Topics include safe operating practices, equipment identification, equipment set-up, correct selection of electrode, current/polarity, shielding gas and base metals. Upon completion, the student should be able to produce groove and fillet welds using consumable welding processes according to AWS Codes and standards.

WDT180 Special Topics (1/2/3)

Prerequisite: Determined by instructor

This course allows the student to plan, execute, and present results of individual projects in welding. Emphasis is placed on enhancing skill attainment in the welding field. The student will be able to demonstrate and apply competencies identified and agreed upon between the student and instructor.

WDT181 Special Topics Lab (0/3/3)

Prerequisite: As required by program

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

WDT218 Certification (1/2/3)

Prerequisite: As required by program

This course is designed to provide the student with the knowledge needed to perform welding 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 applicable welding code requirements.

WDT219 Welding Inspection and Testing (3/03)

Prerequisite: As required by program

This course provides the student with inspection skills and knowledge necessary to evaluate welded joints and apply quality control measures as needed. Emphasis is placed on interpreting welding codes, welding procedures, and visual inspection methods. Upon completion, students should be able to visually identify visual acceptable weldments as prescribed by the code or welding specification report.

the gas tungsten arc welding process according to applicable welding codes.

WDT223 Blueprint Reading for Fabrication (1/2/3)

Prerequisite: As required by program

This course provides a student with advanced skills in identifying and interpreting lines, views, dimensions, notes, bill of materials, and the use of tools of the trade. Emphasis is placed on figuring dimensional tolerances, layout and fitting of different component parts. Upon course completion, a student should be able to interpret, layout, and fabricate from blueprints to given tolerances.

WDT228 Gas Tungsten Arc Welding (2/1/3)

Prerequisite: As required by program

This course provides students with knowledge needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using the gas tungsten arc welding process according to applicable welding codes.

WDT258 Certification Lab (0/3/3)

Prerequisite: As required by program

This course is designed to provide the student with the skills needed to perform welding 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.

WDT268 Gas Tungsten Arc Lab (0/3/3)

Prerequisite: Determined by instructor.

This course provides students with skills needed to perform gas tungsten arc welds using ferrous and/or non-ferrous metals, according to applicable welding codes. Topics include safe operating practices, equipment identification and set-up, correct selection of tungsten type, polarity, shielding gas and filler metals. Upon completion, a student should be able to identify safe operating practices, equipment identification and setup, correct selection of tungsten type, polarity, shielding gas, filler metals, and various welds on ferrous and/or non-ferrous metals, using

GRADUATION REQUIREMENTS

The Chancellor's procedures regarding ACCS Board of Trustees Policy No. 715.01 detailing graduation requirements state that

1. in meeting the requirement for a 2.0 cumulative grade point average over all coursework attempted at the College, a course may be counted only once;
2. a student is not required to pay graduation fees or participate in commencement ceremonies in order to be designated a graduate on the transcript;
3. the chief academic officer shall approve the formal award when the student meets all requirements for graduation; and
4. transcripts will not be provided to a student nor forwarded to any other institution or organization until the student has fulfilled all financial obligations to the College.

Students requiring additional information may contact the student services representative at their respective instructional service center.

Award Requirements

General Education Core for Certificates

Area I

Written Composition I & II 2-6 Cr. Hr.

ENG100 Vocational Technical English I 3

ENG101 English Composition I 3

ENG102 English Composition II 3

ENG100 or ENG103 may be substituted in non-degree eligible programs.

Area II

Humanities and Fine Arts 2-6 Cr. Hr.

Speech is required in certificate programs unless provisions for addressing oral communication competencies represent an integral module in a required discipline-specific course.

SPC100 or SPC103 may be substituted only in non-degree eligible programs.

Area III

Natural Science and Math 6 Cr. Hr.

Requirements distributed in mathematics or science or computer science (data processing). One computer science (data processing) course (two are preferred) or demonstrated computer literacy skills, or the integration of computer proficiencies within a required discipline specific course(s).

MAH100, MAH103 or MAH105 may be substituted only in non-degree eligible programs.

Area IV

History/Social/Behavioral Science 3 Cr. Hr.

Minimum General Education Requirements 10-18 Credit Hours

Area V

Gen Ed/Tech Concentration/Electives 42 Cr. Hr.

Courses appropriate to the degree requirements, occupational or technical specialty requirements, core courses, and electives.

Maximum Program Credit Hours 60

General Education Core for Short Certificates

Area I

Written Composition I and II 0-3 Cr. Hr.

Area II

Humanities and Fine Arts 0 Cr. Hr.

Area III

Natural Science and Math 0-3 Cr. Hr.

Area IV

History, Social/Behavioral Sciences 0 Cr. Hr.

Minimum Gen Ed Requirements 0-6 Cr. Hr.

General Studies Curricula 26 Cr. Hr.

Area V**Max. Gen Ed Core, Technical Concentration,
and Electives 20-26 Cr. Hr.**

*Courses appropriate to the degree requirements,
occupational or technical specialty requirements,
core courses and electives.*

Maximum Program Semester Credit Hours 26**Sem. Credit Hour Range/Award 9-26****Gen Ed Courses****Areas I-II****Oral and Written Communication/ Humanities
and Fine Arts**

Course	Title	Credit Hours
ENG100	Vocational Technical English	3
ENG101	English Composition I	3
ENG102	English Composition II	3
SPC103	Oral Communication Skills	3
SPH106	Fundamentals/Oral Communication	3

Area III**Mathematics, Natural/Computer Science**

Course	Title	Credit Hours
DPT 100	Introductory Computer Skills I	3
MAH101	Introductory Mathematics I	3

Area IV**History, Social and Behavioral Sciences**

Course	Title	Credit Hours
PSY270	Business & Industrial Psychology	3

College Preparatory & Developmental Studies

Course	Title	Credit Hours
MTH098	Elementary Algebra	4
ORT100	Orientation for Career Students	3

ADULT EDUCATION/GED

Students seeking to increase basic literacy skills or earn a GED may enroll in courses through the Adult Education program. All courses are self-paced, and students work directly with highly qualified instructors individually and in small groups. Adult Literacy courses are grouped into three areas: mathematics, reading, and language/writing. An orientation to college course is available as well.

Course	Cr. Hr.	Course	Cr. Hr.	Course	Cr. Hr.
ADL020 Math I	3	ADL031 Reading II	3	ADL065 Orientation to College	3
ADL021 Math II	3	ADL032 Reading III	3	ADL080 Language Usage I	3
ADL022 Math III	3	ADL033 Reading IV	3	ADL081 Language Usage II	3
ADL023 Math IV	3	ADL034 Reading V	3	ADL082 Language Usage III	3
ADL024 Math V	3	ADL035 Reading VI	3	ADL083 Language Usage IV	3
ADL025 Math VI	3	ADL036 Reading VII	3	ADL084 Language Usage V	3
ADL026 Math VII	3	ADL037 Reading VIII	3	ADL085 Language Usage VI	3
ADL027 Math VIII	3	ADL056 Basic Writing	3	ADL087 Language Usage VIII	3
ADL030 Reading I	3	ADL057 Int. Writing	3		

Course Descriptions

ADL020 Math I 3 Cr. Hr.

Beginning Math teaches whole numbers, addition, subtraction, multiplication, and division. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL021 Math II 3 Cr. Hr.

Primary focus is decimals with continuing attention to whole number problems. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL022 Math III 3 Cr. Hr.

Primary focus is on computation of fractions. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL023 Math IV 3 Cr. Hr.

Primary focus is on understanding work problems, with continuing review of previous math criteria. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL024 Math V 3 Cr. Hr.

Primary focus is on percent problems. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL025 Math VI 3 Cr. Hr.

Primary focus is on ratio, proportion, and measurement. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

and materials at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL026 Math VII 3 Cr. Hr.

Primary focus is on algebra with continuing attention to appropriate word problems. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL027 Math VIII 3 Cr. Hr.

Primary focus is on geometry at the Pre-GED level with post-testing on all previous math disciplines. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

ADL030 Reading I 3 Cr. Hr.

This basic reading course introduces comprehension and understanding of basic words, their meanings, and spellings. All instructions and materials are at Pre-GED levels, structured toward self-pacing with tutorial assistance. The student is frequently assessed to determine progress.

ADL031 Reading II 3 Cr. Hr.

This basic reading course is designed to help readers improve their comprehension of basic words, their meanings and spellings. All instructions and materials are at Pre-GED levels, structured toward self-pacing with tutorial assistance.

ADL032 Reading III 3 Cr. Hr.

This basic reading course is designed to help readers improve comprehension of words, vocabulary, study skills and reading rate. All instructions and materials are at Pre-GED levels, designed for self-pacing with tutorial assistance.

ADL033 Reading IV**3 Cr. Hr.**

This comprehensive reading course is designed to help readers improve comprehension, vocabulary, study skills and reading rate. All instructions and materials are at Pre-GED levels, designed for self-pacing with tutorial assistance.

ADL034 Reading V**3 Cr. Hr.**

This comprehensive reading course is designed to help readers improve comprehension, vocabulary, study skills, and reading rate. All instructions and materials are at Pre-GED levels, designed for self-pacing with tutorial assistance.

ADL035 Reading VI**3 Cr. Hr.**

This elevated comprehensive reading course is designed to help readers improve comprehension, vocabulary, and reading rate. All instructions and materials are at Pre-GED levels, designed for self-pacing with tutorial assistance.

ADL036 Reading VII**3 Cr. Hr.**

This elevated comprehensive reading course is designed to help readers improve comprehension, vocabulary, and reading rate. All instructions and materials are at Pre-GED levels, designed for self-pacing with tutorial assistance.

ADL037 Reading VIII**3 Cr. Hr.**

This final reading course is designed to help readers improve comprehension, vocabulary, and reading rate. All instructions and materials are at Pre-GED levels designed for self-pacing with tutorial assistance. The student is frequently assessed to determine progress. Post-testing is a final qualifier for the GED exam.

ADL056 Basic Writing**3 Cr. Hr.**

This course is designed to meet the needs of students with writing deficiencies. Topics include grammar, usage, sentence structure, and paragraph development. Upon completion, using rules of grammar, students should be able to write paragraphs that start with a topic sentence and develop with three or four complete sentences.

ADL057 Intermediate Writing**3 Cr. Hr.**

This course is designed to meet the needs of students with moderate writing deficiencies. Topics include grammar, usage, sentence structure, transitional tools and paragraph development. Upon completion, students should be able to write a composition of three or more paragraphs developing a topic related to a technical occupation.

ADL065 Orientation to College**3 Cr. Hr.**

This course provides an orientation to college for non-high school graduate enrollees. It includes an introduction to locating and using a wide variety of useful information about colleges in the Alabama Two-Year College System.

ADL080 Language Usage I**3 Cr. Hr.**

This course teaches phonics level language, the alphabet, phonetic sounds, basic word construction/ pronunciation. All instructions and materials are at Pre-GED levels, geared toward self-pacing with tutorial assistance.

ADL081 Language Usage II**3 Cr. Hr.**

This course is a continuation and completion of phonics level work and beginning work on basic level language usage. All instructions and materials are at Pre-GED levels, geared toward self-pacing with tutorial assistance.

ADL082 Language Usage III**3 Cr. Hr.**

Primary focus is continuation and completion of basic level language usage, with concentration on sentence structure and usage. All instructions and materials are at Pre-GED levels, geared toward self-pacing with tutorial assistance.

ADL083 Language Usage IV**3 Cr. Hr.**

Primary focus is on intermediate level language usage with concentration correct use of punctuation in sentences. All instructions and materials are at Pre-GED levels, geared toward self-pacing with tutorial assistance.

ADL084 Language Usage V**3 Cr. Hr.**

Primary focus is on continuation and completion of intermediate level language usage and beginning study of advanced level language usage, with concentration on paragraph structure and usage. All instructions and materials are at Pre-GED levels, geared toward self-pacing with tutorial assistance.

ADL085 Language Usage VI**3 Cr. Hr.**

Primary focus is on continuation and completion of advanced level language usage, with concentrated study on essay structure and usage. All instructions and materials are at Pre-GED levels. Materials are geared toward self-pacing with tutorial assistance.

STUDENT SUPPORT SERVICES

Student Support Services identifies qualified low-income, first-generation college students or physically handicapped students who are enrolled or accepted for enrollment by institutions receiving federal grants, providing support services for those students as they pursue postsecondary education.

Student Support Services is a federally funded program. Grant funds provide life skills instructional, personal and academic counseling, career guidance, and tutoring necessary for success beyond high school. The goal of the program is to increase retention/graduation among these students.

Additional services include college and career counseling, workshops, and seminars with representatives of four-year institutions. These services assist currently enrolled students to qualify for, secure admission to, and receive financial aid to facilitate success in four-year institutions of higher education.

Current students and prospective students interested in these services may contact a Student Support Services representative or ask a member of the faculty for more information.

Job Placement Assistance

ISTC provides comprehensive placement assistance to all students. The primary goal of the job placement team is to assist students in transitioning from the technical college level to his/her next objective, whether educational or vocational. Career planning is a developmental process, designed to lead to a successful job search and placement.

Students may evaluate or reevaluate their career/college choices through the placement services provided at Ingram State.

Students interested in placement services should contact their advisor or a job placement/student services representative at any Ingram instructional site, or write to the Reentry Coordinator at the following address:

Reentry Coordinator
J. F. Ingram State Technical College
Post Office Box 220350
Deatsville, Alabama 36022

Special Services Program

Special Services provides special education service to eligible students at four designated sites in central Alabama. The designated sites include Donaldson Correctional Facility, Frank Lee Work Community-based Facility, Staton Correctional Facility and Tutwiler Women's Prison.

Programs offered to special education students through Special Services are based on a K-12 curriculum and are contracted through the Alabama Community College System to meet the needs of incarcerated students and to meet the requirements of the Individuals with Disabilities Education Act (IDEA, Public Law 101-476).

Students in the program may earn either the Alabama Online High School Diploma or the Alabama Occupational Diploma. Students can also participate in GED preparation and testing, vocational programs at the high school and post-secondary level, transition services for students 90 days prior to release and vocational rehabilitation referrals.

All course offerings match the educational programs implemented by the Alabama State Department of Education Course of Study and are consistent with the student's Individualized Educational Program (IEP).

PERSONNEL DIRECTORY

Annette Funderburk.....	President
Albright, Ray.....	Cabinetmaking Instructor
Allen, Julian	Vocational Core Training Assistant
Allen, Tonya.....	SES Assistant
Anderson, Delicia	AE Instructor
Annis, Rodney	AE Instructor
Atkins, Derrick	AE Instructor
Banks, Quincey.....	Electrical Technology Instructor
Barnes, Lorraine	AE Instructor
Barnett, Connie	Barbering Instructor
Batie, Jerome	Career Specialist
Baynard, Malinda	Transition Specialist
Bennett, AL.....	AE Instructor
Benz, Larissa.....	AE Instructional Support Coordinator
Berwager, Thomas	Carpentry Instructor
Bibbins, Eric.....	Student Advisor
Black, Bradley.....	Welding Instructor
Boswell, Inez	AE Instructor
Brantley Boyd.....	Director of Accounting
Brashears, Kimberly.....	Administrative Assistant to the President
Brown, Edward.....	AE Instructor
Bullard, Wayne.....	Barbering Instructor
Carlee, Jerrica.....	Administrative Assistant
Chatterton, Derrick	AE Instructor
Cherry, Shannon.....	Administrative Assistant
Childress, Daniel.....	Welding Instructor
Chisum, Woody	Auto Body Repair Instructor
Conger, Kerri	Business Office Specialist / Accounts Payable
Costa-Taylor, Stacy.....	Student Services Admissions Specialist
Crawford, Derek.....	Drafting & Design Technology Instructor
Cunningham, Keith.....	Carpentry Instructor
Curry, Scotty.....	Welding Instructor
Day, Spencer	Carpentry Instructor
DeNeal, Marilyn	AE Instructor
Dike, Evelyn	AE Instructor
Downing, Kimberly.....	SES Data Technician
Duncan, Hayward	Barbering Instructor
Edwards, Rosie	Dean of Students
Emfinger, Kelly	Reentry Director
Etheridge, Richard.....	Auto Mechanics Instructor
Farrior, Ukeshia.....	SES Assistant/Psychometrist
Ferguson, Zeb.....	Welding Instructor
Foshee, Jim.....	Instructional Assistant

Foshee, Renee	Admin. Asst./Center Director
Fox, Amelia	Interim Dean of Administration
Franks, Janet	AE Instructor
Freeman, Benjamin.....	Industrial Maintenance Technology Instructor
Gant, Lewis	Electrical Technology Instructor
Gantt, Jade	Job Placement Coordinator
Garner, Tony	Facilities Maintenance Technician
Gibbons, Candace	Mathematics Instructor
Givens, Jeanna	Business Office Specialist / Payroll and Purchasing
Grubach, Robert.....	Welding Instructor
Hails, LaShanda	Pardons and Parole Programs Director
Hall, Jacqueline	SES Assistant
Hamby, Kenneth.....	Industrial Maintenance Instructor
Hamilton, Jerry	Marine Technology Instructor
Hawkins, Daphne	Student Services Admissions Specialist
Henderson, James	Director of Information Systems
Hinds, Dianne	AE Instructor
Hodge, William.....	Tutorial Specialist
Holloway, Artemas.....	Logistics Instructor
Hudson, Timothy.....	AE Instructor
Hulett, LeShauna	SES Coordinator
Hull, Randy	Diesel Mechanics Instructor
Huskey, Don	Instructional Assistant
Ingram, Chris	Welding Instructor
Johnson, Allen	Commercial Truck Driving Instructor
Johnson, Kelvin.....	Facilities Maintenance Technician
Johnson, Vince	AE Instructor
Jones, Derek.....	Electrical Technology Instructor
Jones, Jason.....	HVAC Instructor
Jones, Kelvin.....	Job Placement Coordinator
Jones, Michael.....	AE Instructor
Jones, Russell	Industrial Certification Assistant
Keahey, Terry	Career Technical Assistant
Killcreas, Obie.....	Student Services Director
Killcreas, Chad	IT Support Specialist
Knight, Larry	Center Director/Draper
LaFrance, Keith.....	Computer Instructor
Lang, Allen	AE Instructor
Lee III, William.....	Plumbing Instructor
Lewis, Joyce.....	AE Instructor
Lowe, Keith.....	Carpentry Instructor
Lucas, Eddie.....	Carpentry Instructor
Matthews, Sheree	Administrative Assistant

Maxwell, Larry	AE Instructor
McClarín, Kercilda	Office Administration Instructor
McLean, Matt	Center Director – Bibb/Donaldson
McClellan, Eric	Auto Mechanics Instructor
McDowell, Michelle	Financial Aid Assistant
McDuffie, Jacqueline	Administrative Assistant
McIver, Sharifay	Student Services Enrollment Coordinator
Milledge, David	Masonry Instructor
Miller, Lawrence (Dr.)	Center Director/Limestone
Mims, Michael	SES Assistant
Mitchell, Steve	SES Assistant
Moore, Shawn	Automotive Service Writer Instructor
Morgan, Courtney	Administrative Assistant
Morgan, Jerome	SES Assistant
Nash, Marcus	AE Instructional Support Coordinator
Nelson, Scott	Welding Instructor
O’Steen, John	AE Instructor
Owens, Alexis	English Instructor
Owensby, Bonita	Registration and Admissions Assistant
Patterson, Erica	Student Services Admission Specialist
Patterson, Lee	HVAC Instructor
Peck, Ralph	HVAC Instructor
Phillips, Ira (Dr.)	Coordinator of Workforce Development
Poole, Matt	Logistics Instructor
Porterfield, LaTonya	Enrollment Coordinator
Powell, Bill	Associate Dean of Faculty Development & Institutional Effectiveness
Powers, James	AE Instructor
Probst, Julliana (Dr.)	Associate Dean of Instruction
Rasbury, Shane	HVAC Instructor
Richardson, Andrea	Human Resources Coordinator
Riggins, Bryan	SES Assistant
Roan, Carl	Carpentry Instructor
Robinson, Charlotte	Instructional Assistant
Rolin, Thomas	Auto Body Repair Instructor
Rose, Samantha	Public Relations Coordinator
Sawyer, Eddie	Electrical Technology Instructor
Scott, Courtney	AE Instructor
Shore, Craig	Associate Dean of Student Services
Sims, DeQuandolyn	Cosmetology Instructor
Senn, Patrick	Maintenance Technician
Smith, Gregg	Electrical Technology Instructor
Smith, Latashia	Electrical Technology Instructor

Smith, Verna.....	Cosmetology Instructor
Spurlin, Chad	Masonry Instructor
Staley, Derek	SES Assistant
Strength, Emma	Business Office Specialist/Budget Analyst
Stoehr, Michael	AE Instructor
Taylor, Jeffrey.....	Horticulture Instructor
Thomas, Darren.....	Drafting & Design Technology Instructor
Thompson, Jay	Facility Projects & Transportation Coordinator
Thomas, Jeff	Facilities Maintenance Technician
Thompson, John	Plumbing Instructor
Thompson, Phaidra	SES Assistant
Thornburg, Johnny	Utility Tree Trimming Instructor
Tippins, Stanley (Dr.)	Center Director/ATEF
Trahan, Eric	Carpentry Instructor
Tuck, Kimberly.....	Special Education Services Assistant
Twyman, Tameka	Administrative Assistant
Tyson, Daniel	Research and Grant Analyst
Wade, Julie	SES Assistant
Walker, George	HVAC Instructor
Walker, Sharon.....	Adult Education Director
Ward, Lucian (Dr.)	Speech Instructor
Wesson, Billy	Welding Instructor
Williamson, Daniel	Carpentry Instructor
Willoughby, Tonya	AE Administrative Assistant
Wofford, Phoenix	Barbering Instructor
Wood, James J.....	SES Office Specialist
Wright, Jason.....	GED Testing Specialist
Wynn, Martha	Academic Coach
Young, Joanne	Career Coach
William “Butch” Young (Dr.).....	Dean of Instruction

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