Accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC)
Licensed by the Michigan Department of Licensing and Regulatory Affairs (LARA)
Certificated by the Federal Aviation Administration (FAA)
Approved for the Federal Military and Veterans Education Benefits (VA)
Institutional Participant in the SARA Initiative
National Council for State Authorization Reciprocity Agreements (NC-SARA)
Midwestern Regional State Authorization Reciprocity Agreement (M-SARA)
Message from the President

Dear Students,

Congratulations on the start of your new journey filled with exciting opportunities leading to a successful and rewarding career. As the President of the Canton Campus, it is my sincere pleasure to welcome you to the MIAT College of Technology family. MIAT has a long and storied history of training individuals to succeed in the skilled trades. We are proud of our many graduates that have become leaders and managers in their chosen field, finding career success with companies such as Delta Airlines, Spirit Airlines, Duke Energy, Siemens, and General Electric to name a few.

Many people dream of going to college and completing a degree or certificate of training. Only a percentage of those who dream of it do it. You have embarked on becoming one of the select few who, in a few short months, will realize their dreams and make their goal a reality.

The faculty, administration and staff of MIAT College of Technology is committed to providing you with the tools, resources, and skills you will need to be successful in school and in your chosen career field upon graduation. We are here for you. Should you have questions, comments, concerns, or need specific resources, please ask any member of the faculty or staff for assistance.

On behalf of all of us at MIAT, we are honored that you have chosen us to help you achieve your educational and career goals. We look forward to seeing your future career success.

Best regards,

Jennifer M. Paugh
President – Canton Campus
Canton Campus Administration

Jennifer Paugh – President
Chris Pipesh – Vice President of Education
Peter Kostiuk – Vice President of Finance/Strategic Ops
Cristy Ratliff – Vice President of Student Finance
Shuhdi Alrishood – Assistant Director of Education

Adrienne Ontiveroz – Director of Admissions
Chris Davis – Asst Director of Community Partnerships
Christal Yono – Director of Career Services
Shannon Wilson – Director of Human Resources

Change of Content

This catalog gives a general description of MIAT College of Technology and provides detailed information regarding the departments within the college and curricula offered by MIAT.

This Catalog incorporates herein, by reference, the Enrollment Agreement, the Student Handbook and any addendums or supplements issued after the publication date and, thereby, are part of the Catalog. The provisions of this and other school publications, documents, and forms are not to be regarded as an irrevocable contract between the student and MIAT College of Technology. The school reserves the right to make any and all changes to this and other publications, documents, and forms, including but not limited to, changes to program length, content, materials, or schedule at any time. However, any modification of student’s tuition rate, fees and refund policies will remain unchanged provided the student maintains continuous attendance. Any modification of tuition, fees or refund policies shall be agreed to in writing by all parties.

Online Catalog

An online version of this catalog, along with catalog addendums and supplements, are available at http://www.miat.edu/student-services/student-catalogs. Addendums and supplements to the catalog are provided to reflect updated information that includes additions, corrections, and/or changes to the initial publication of the catalog.

Consumer Information

Consumer Information can be found on MIAT’s webpage at https://www.miat.edu/consumer-information/. Additional consumer information and disclosures are available throughout various MIAT publications and informational materials provided to prospective, new, and continuing students.

As a prospective student, you advised to review this catalog prior to signing an enrollment agreement. You are also encouraged to review the MIAT’s graduation and employment rates for each program located at: https://www.miat.edu/disclosures/. These rates are updated annually in October.
Table of Contents

Preface
   Welcome Message from the Campus President........i
   Campus Administration .....................................ii
   Change of Content ............................................ii
   Online Catalog ................................................ii
   Consumer Information .......................................ii
   Table of Contents ..............................................iii

General Information
   Philosophy and Objectives ................................1
   History ..........................................................1
   Campus Locations ............................................2
   Ownership ......................................................2
   Accreditation, Approvals ..................................2
   Memberships and Other Affiliations .....................2
   Program Advisory Committees (PAC) .....................3
   Facilities and Equipment ..................................3
   Notice of Non-Discrimination .............................4
   Personal Property ............................................4
   Weapons, Explosives, Similar Devices ..................4
   Addenda and Supplements to the Catalog ..............4
   Questions, Concerns, Complaints ........................4

Admissions Requirements and Procedures
   Application Process .........................................5
   Admission Requirements – Certificate ..................5
   Admission Requirements – Associate Degree ..........5
   Conditional Acceptance ....................................6
   Acceptance of Denial of Admission ......................6
   Demonstration of English Proficiency ..................6
   Background Self Disclosure/Evaluation .................6
   Online Course Requirements .............................6
   Age Requirements ...........................................6
   Vaccine Policy ...............................................6
   Admission of Disabled Students ..........................7
   Transfer and Comparable Credit Policy ................7
   Transferability of Credits to Other Institutions .......8
   New Student Orientation ...................................8

Career and Student Services
   Graduate Employment Assistance .......................9
   Alumni Retraining ...........................................9
   Student Employment Assistance .........................9
   Veteran Services ............................................9
   Student Handbook ...........................................9
   Tutoring ......................................................9
   Learning Resource System ................................10
   Commencement Ceremony ................................10
   Advising and Community Resources ....................10

Financial Aid
   Federal Direct Subsidized Loan ..........................11
   Federal Direct Unsubsidized Loan .......................11

Federal Direct Plus Loan ..................................11
Federal Pell Grant .............................................11
Veteran Benefits .............................................11
Other Financial Aid Programs .............................11
Scholarship Programs ........................................11
Code of Conduct (HEOA) .....................................12
Third Party Exam Fees .......................................12
Tuition, Books, Tools, and Supplies .....................12
Refund Policies ...............................................12
Withdrawals ....................................................13
Return of Non-Title IV Funds ...............................13
Return of Federal Title IV Funds ..........................13
Post Withdrawal Disbursement ............................14
Cost of Education .............................................14

Academic Policies
   Grading System .............................................15
   Final Grade Appeals ........................................15
   GPA and CGPA Calculations ...............................15
   Satisfactory Academic Progress Policies ................15
   Pace of Completion ........................................16
   Academic/Financial Aid Warning .........................16
   SAP Appeal Process ........................................16
   Academic/Financial Aid Probation .......................16
   Incomplete Coursework ....................................17
   Re-Establishing Eligibility ...............................17
   Distance Education .........................................17
   Class Size ....................................................17
   Class Availability ..........................................17
   Course Repetitions ........................................17
   Auditing a Course .........................................17
   School Hours ................................................18
   Clock Hour ...................................................18
   School Closings ............................................18
   FAA Certification ...........................................18
   Early FAA Oral and Practical Examinations ............18
   Privacy of Student Records (FERPA) ....................19
   Privacy for Educational Records of Graduates .......20
   Graduation Requirements .................................20
   Class Attendance and Absence Policy ..................20
   Make-Up Time: FAA Certificated Programs ............20
   Excused Absences .........................................21
   Attendance Taking Procedures ...........................21
   Tardiness Policy .............................................21
   Early Departure from Class ..............................21
   Leave of Absence ..........................................21
   Professional Conduct and Appearance .................22
   Comprehensive Student Complaint and
   Dispute Resolution System ...............................22
   Student Complaint and Grievance Procedure ..........23
# TABLE OF CONTENTS

## Programs of Study

- Aviation Maintenance Technology-AAS .................... 24
- Airframe and Powerplant Technician Certificate ....... 26
- Energy Technology-AAS ........................................ 28
- Industrial Maintenance Technician Certificate ....... 29
- Wind Power Technician ........................................ 30
- HVACR Technician Certificate ................................. 31
- Robotics and Automation Technology-AAS ............ 32
- Robotics and Automation Technician Certificate .... 33
- Welding Specialist Certificate ............................... 34

## Course Descriptions

- Aviation Maintenance Technology ............................. 35
- Energy Technology ..................................................... 39
- HVACR Technician .................................................... 41
- Robotics and Automation Technology .................... 43
- Welding Specialist .................................................... 45
- General Education Courses .................................... 47

## Management, Department Heads, Faculty and Staff

- Management .......................................................... 48
- Faculty ................................................................. 51
- Administrative Staff ............................................... 53

## Academic Calendars

- 2020 ................................................................. 54
- 2020 (Welding Only) ............................................. 55
- 2021 ................................................................. 56
- 2021 (Welding Only) ............................................. 57

## Index

................................................................. 58
MIAT College of Technology
General Information

Philosophy

MIAT College of Technology is committed to serving students, employers, and communities through career education, career advancement and personal enrichment.

Objectives

To serve the student
• Providing contemporary, career-focused education delivered through theoretical lectures and hands-on learning platforms.
• Providing placement assistance for marketing the skills developed during training
• Providing avenues for continued academic and professional growth

To serve employers
• Providing quality employees who have sound practical, technical, and theoretical backgrounds and who are committed to their professional responsibilities.

To serve the citizens of the community
• Developing a school-community partnership working cooperatively to the benefit of the student population, the school, and the citizens of the community.

History

MIAT College of Technology is a private school founded in 1969 by a highly experienced aircraft technician whose foresight regarding the growth of the aviation industry motivated him to develop a training resource for aircraft technicians.

The original school, named Detroit Institute of Aeronautics, was located on the west side of Willow Run Airport. The school had expanded to 14,300 square feet by 1980. In response to dramatic growth and sophistication in the aviation industry, a new 38,000 square foot training facility was constructed in 1990 for classes beginning in 1991. In 2010 the school expanded again and moved operations to a 125,000 square foot facility in Canton, Michigan.

Aviation Technology programs were created in 1969 to encompass training focusing on FAA certificated curriculum. Graduates of the Aviation Technology programs are eligible to take federal exams that qualify them to be certificated Airframe and Powerplant (A&P) Technicians.

Energy Technology programs began in 2007 in response to the energy industry looking for qualified technicians to work in steam and gas turbine technology, power plant operations, wind turbine technology, and other areas of power generation such as substation, standby, and nuclear. The industry recognized the high degree of skills that the aviation graduates possessed and asked for a program that was similar, but also specific, to the energy industry needs.

In 2010, MIAT College of Technology opened a branch campus in Houston, Texas, originally offering only the energy programs to meet demand for skilled technicians for the oil and gas and energy producing industries in Houston and surrounding areas. Course offerings at the Houston campus have since expanded to include aviation maintenance, heating and cooling, welding and non-destructive testing.

The HVACR Technician program was created in 2012 to meet the demand for residential and commercial technicians with obtaining EPA certifications and skills in installation, maintenance and service of climate control equipment.

In August 2012, MIAT College of Technology received approval from the State of Michigan Licensing and Regulatory Affairs (LARA) and the Accrediting Commission of Career Schools and Colleges (ACCSC) to offer an Associate in Applied Science (AAS) degree in Aviation Maintenance Technology. As a degree granting institution, the State of Michigan recognized MIAT as a college. In the fall of 2012 MIAT changed its name from Michigan Institute of Aviation and Technology to MIAT College of Technology to reflect this achievement.
On August 18, 2014, Michigan Institute of Aeronautics, Inc. (dba MIAT College of Technology) was acquired by HCP ED Holdings, Inc. which is affiliated with Hispania Private Equity II, L.P.

The Robotics and Automation Technology Associate in Applied Science degree and the Robotics and Automation Technician certificate programs began enrolling students at the Canton campus in 2018. The programs are designed to create a knowledge bridge for the technician between mechanical technology and the electrical and electronic circuits used to control and automate mechanical processes.

Following the Houston campus’s successful launch of the welding program in 2018, the Canton campus added welding in 2019. The welding programs are specifically designed to prepare graduates for entry-level positions in structural, pipe and pipeline, thin alloy welding, pipefittings, and steam fitting.

**Campus Locations**

**Main Campus – Canton, Michigan**
2955 S. Haggerty Road
Canton, MI 48188

**Branch Campus – Houston Texas**
533 NorthPark Central Drive, Suite #150
Houston, TX 77073

MIAT’s main campus is located north of Michigan Avenue on S. Haggerty Road in Canton Township, Michigan just off of I-275 in Wayne County. The school purchased the 125,000 square foot facility in January 2010 and completed extensive remodeling prior to the start of classes in May of 2010.

**Ownership**

Michigan Institute of Aeronautics, Inc. is a subsidiary of HCP ED Holdings, Inc. which is affiliated with Hispania Private Equity II, L.P.

**Accreditation and Approvals**

MIAT is affiliated with a variety of educational and industry-related agencies and organizations. Some assist the school in maintaining standards; others provide technical information for the development of educational methods and curriculum. Specific approvals indicate funding eligibility of financial aid for students. Copies of the documents describing the school’s accreditation and licensing may be reviewed by current or prospective students by contacting the President.

**United States Department of Education**

MIAT College of Technology is eligible to participate in the Federal student financial assistance programs administered by the Department of Education under Title IV of the Higher Education Act of 1965 as amended.

**Accrediting Commission of Career Schools and Colleges (ACCSC)**

MIAT College of Technology is accredited by The Accrediting Commission of Career Schools and Colleges (ACCSC), listed by the U.S. Department of Education as a nationally recognized accrediting agency.

**Michigan Department of Licensing and Regulatory Affairs (LARA)**

MIAT College of Technology is licensed to operate in the State of Michigan. All programs are approved by the Michigan Department of Licensing and Regulatory Affairs (LARA).

**Department of Veterans Affairs (VA)**

Programs are approved for federal military and veteran educational benefits. Information regarding benefits may be obtained from MIAT’s veteran certifying official.

**Federal Aviation Administration (FAA)**

MIAT operates FAA approved Aviation Maintenance Technician programs. Certificate #BN9T040R.

**FAA Airmen Knowledge Testing (PSI/CATS)**

MIAT proctors FAA Airmen Knowledge Tests in their approved PSI/CATS facility located within the school. Certificate #ABS481034

**Midwestern Regional State Authorization Reciprocity Agreement (M-SARA)**

**National Council for State Authorization Reciprocity Agreements (NC-SARA)**

**National Center for Aerospace and Transportation Technologies (NCATT)**

MIAT is an accredited training provider.

**North American Technician Excellence (NATE)**

MIAT is an approved Testing Organization (Provider ID 5510)

**Memberships and Other Affiliations**

Aerospace Industry Association of Michigan (AIAM)
Aircraft Electrical Association (AEA)
American Wind Energy Association (AWEA)
Association for Women in Aviation Maintenance (AWAM)
**Program Advisory Committees**

The opportunity to obtain input, feedback, ideas, and multiple perspectives from individuals with a vested interest in the success of MIAT and its student population is a key component to the success, growth, and improvement of the college. MIAT has established Program Advisory Committees (PACs) for each career program area. PACs are comprised of appropriately qualified representatives that external to the school, representing the employment community and/or practitioners from the program area, who can provide a meaningful review of MIAT’s programs, and supporting resources and materials. Program Advisory Committee members meet biannually (Fall and Spring) with MIAT faculty and administration to review and provide feedback and guidance on curriculum changes, equipment acquisitions, and career opportunities.

**Facilities and Equipment**

The main campus has 19 classrooms including computer labs and a Learning Resource Center, a PSI/Computer Assisted Testing Service (PSI/CATS) facility, career/student services center, veteran resource center, faculty and administrative offices and student break areas.

Included in this facility is 79,000 square feet for hands-on training activities. A hangar/shop area houses aircraft, turbines, generators, furnaces, roof top units, chillers, conveyors, robotic arms, and other related industry specific equipment. Additional lab areas are specifically designed for non-destructive inspection, sheetmetal, welding, painting, composites, confined space and climb training. Students at MIAT benefit from practical application using basic equipment found in various segments of the aviation, energy, heating and cooling, industrial manufacturing and various industries that incorporate welding and/or utilize automated manufacturing equipment.

Housed on the campus for use in the Aviation Technology programs are numerous aircraft including a Sabreliner twin-engine jet, a twin-engine Cessna 421, a twin-engine Cessna 337 and an Enstrom Helicopter. Additionally, the school possesses a wide assortment of reciprocating and turbine-jet powerplants, generator and electrical distribution mock-ups, airframe and powerplant training mock-ups and ground equipment, including a Pratt & Whitney JT9D engine used on Boeing 747 aircraft.

In April 2015 MIAT College of Technology entered into an agreement with Spirit Airlines to host a state-of-the-art, 14-student A320 Airbus Competency-Based Training (“ACT”) Next Generation Aircraft computer-based training (CBT) maintenance simulation laboratory at the Canton campus. The equipment, which includes fully functional virtual aircraft and a virtual flight deck, allows trainees to practice all maintenance, testing, diagnostics, repair and operation procedures exactly as on actual, live aircraft. MIAT College of Technology is the first FAA approved aviation maintenance school in the world to partner with an operator to host a CBT lab of this type. The lab is used by Spirit Airlines to train all their technicians and has been incorporated into the current curriculum for MIAT students.

In 2017, MIAT was selected by Delta Airlines as one of 38 schools nationwide to partner with the airline to train students for careers in aviation maintenance.
Energy Technology students train on a variety of industry equipment which include a Westinghouse W251 turbine engine weighing 130,000 pounds, General Electric GE 1.5MW wind turbine, wind turbine blades, climb and rescue apparatus, state certified operating boiler, and technical equipment found in power plants. Courses in the energy program also include introduction to the use of welding equipment, proper use of industry standardized lifting and rigging equipment, precision measuring devices, confined space training and various sizes and types of engines found in power generation. Additionally, students are exposed to a wide range of general and industry-specific tools.

The HVACR program utilizes a variety of widely used residential and light commercial equipment. Specifically, industry partners have provided high efficiency furnaces, residential and commercial air-conditioning equipment, and light commercial refrigeration units.

The Robotics and Automation programs have various control systems and/or simulators used in manufacturing including industrial robotic arms, industrial and networking control systems, 3-D printers, and an autonomous conveyor system.

The Welding programs utilize a variety of widely used welding equipment. The lab area has 29 welding stations and 3 grinding stations. Students have use of multifunction welders, bevel torches, pipe bevel torches, floor grinders, band saws, cutting torches, and plasma cutters.

The college also possess a wide assortment of advanced electrical and mechanical equipment and simulators that demonstrate integrated functionality and operational concepts. The programs also incorporate hydraulic and pneumatic equipment and simulators that reinforce system principles and operation.

**Notice of Non-Discrimination**

MIAT College of Technology neither denies admission nor discriminates on the basis of race, religion, color, gender, sexual orientation, genetic information, age, disability, or national origin in its employment or educational programs and activities. A person who believes that such discrimination has occurred in the school should contact the Campus President to initiate a review.

**Personal Property**

All student personal property, including, but not limited to, clothing, tools, books, and vehicles is the responsibility of the student. While the school may make storage areas available for personal property, the school is not responsible for personal property that is lost, stolen, damaged, or destroyed.

**Weapons, Explosives, Similar Devices**

MIAT College of Technology prohibits an individual to possess, carry or otherwise transport any weapon; (including handguns and rifles) any explosive devices or other similar items onto any school premises, including parking area, facilities, aircraft and vehicles. All knives must be collapsible and primarily designed and used for work purposes. No other knives may be possessed, carried or transported onto school premises, including facilities, and are subject to the provisions of this section. Any person who violates this policy is subject to probation, suspension and/or dismissal.

**Addenda and Supplements to the Catalog**

Please note, the catalog is not considered complete unless the appropriate addenda or supplements (if applicable) are included. An addendum or supplement to the catalog may serve as a price sheet for tuition and other student charges related to enrollment, including but not limited to, tuition, deposits, fees, books, supplies, tools, equipment, and any other fees for which a student may be responsible. The supplement or addendum may also publish the current Academic Calendar identifying start dates, vacation periods, break days, holidays, etc.

**Questions, Concerns or Complaints**

If you need information or have any concerns, please ask your Admissions Representative, Instructor or any member of the staff. If you have a complaint that is unresolved by another member of the staff, contact the Campus President.

You may address questions, concerns or complaints in writing to:

School Review Board  
c/o MIAT College of Technology  
2955 South Haggerty Road  
Canton, Michigan, 48188
Admission Requirements and Procedures

Application Process

Prospective students interested in obtaining additional information about MIAT College of Technology and its program offerings should contact an MIAT College of Technology Admissions Representative. The Admissions Representative will provide general information about MIAT and, based on this discussion, will determine if the prospective student should be scheduled for a Student Interest and Motivation Assessment (SIMA).

During the SIMA, the Admissions Representative will explain admission requirements, review program information, career opportunities, employment assistance, educational costs and conduct a tour of the facilities. In the event a SIMA is conducted offsite, a tour of the facilities is required prior to starting training. All prospective students interested in attending MIAT College of Technology must participate in a SIMA with an Admissions Representative.

After meeting with an Admissions Representative, prospective students interested in applying to MIAT College of Technology must complete an Application for Consideration and any additional required documentation to begin the application process as well as submit a $25 application fee.

Note: Veterans and current service members may apply for a waiver of the application fee. To apply for the waiver, the applicant must complete the Application Fee Waiver Form – Military at the time of application and provide appropriate documentation.

All Applications for Consideration will be accompanied by an Admissions Representative’s recommendation to the Admissions Committee detailing the applicant’s strengths and potential challenges as it relates to successfully completing the selected training program and/or obtaining meaningful employment upon graduation. The applicant will then, with the assistance and guidance of MIAT support personnel, begin the post-application process.

Admission Requirements: Certificate Programs

For applicants requesting admission to one of the MIAT College of Technology Certificate programs, the applicant must provide one of the following:

1. A copy of a high school diploma or a copy of a high school transcript indicating successful completion of the requirements for high school graduation and the date of graduation.

2. A copy of Certificate of High School Equivalency (aka GED) or a copy of the GED transcript showing fulfillment of the requirements for GED.

3. An official letter signed by an appropriate school or state official indicating graduation status and graduation date.

4. An official college transcript indicating one of the following:
   a. high school graduation status
   b. the completion of an associate, bachelor or master’s degree

Admission Requirements – Associate Degrees

For applicants requesting admission to one of the MIAT College of Technology Associate in Applied Science degree programs, the applicant must meet one of the following requirements:

1. Be a graduate from the MIAT Certificate version of the program or an aligned program.

2. Have earned a certificate or diploma from another institution that aligns with the program and is approved via the transfer approval process as outlined in this catalog.

All documentation must be in English or have been translated into English by a recognized translator. Admission documentation for students from foreign countries must be translated and certified to be at least equivalent to a U.S. high school diploma.
Conditional Acceptance

An applicant may receive a conditional acceptance to MIAT College of Technology pending receipt and verification of all required documentation. The Enrollment Agreement is not valid until a college official countersigns the Agreement after verifying documentation that all admission requirements are met, which includes receipt of Proof of Graduation (POG) or a valid equivalent.

Acceptance or Denial

The Admissions Requirements listed above will determine acceptance or denial into MIAT defined as:

1. **Accepted**: Applicant has met or exceeded all admissions requirements.

2. **Denied**: Applicant has failed to provide required documentation and/or achieve admissions requirements as detailed above.

Applicants who have their admission denied will be provided formal notification as to the reason(s) why and afforded an opportunity to appeal the denial decision. All appeals should be addressed to:

   School Review Board  
   c/o MIAT College of Technology  
   2955 South Haggerty Road  
   Canton MI, 48188

The appeal will be reviewed by the School Review Board to determine whether the applicant has taken the necessary steps to meet the admissions requirement and/or be granted a waiver.

Admission to MIAT is on a space-available basis. To be eligible for enrollment, the applicant must execute an Enrollment Agreement and have received acceptance by the Admissions Committee.

Demonstration of English Proficiency

All courses are taught in English; therefore, applicants must be able to speak, read, write and understand English. Applicants for whom English is a second language may be required to demonstrate English communication skills by way of the Test of English as a Foreign Language (TOEFL) exam or other acceptable documentation of ability to read, write and understand the English language.

Background Self-Disclosure/Evaluation

To ensure the safety of our student population, staff and faculty all applicants are requested to accurately self-disclose all criminal convictions and/or pending charges (misdemeanors and felonies) at the time of application on their Application for Consideration. A criminal conviction is not necessarily a barrier to admittance. The Admissions Committee will assess the circumstances surrounding the offense, time frame, nature, gravity and the relevancy of the conviction to potential employment limitations after graduation. Based on the evaluation by the Admissions Committee, MIAT reserves the right to conduct a secure background check of further information. Background evaluations include, but are not limited to:

   a. Social security number verification  
   b. Driving record verification  
   c. Sexual and/or violent misconduct  
   d. Use of aliases  
   e. State and national criminal history

MIAT reserves the right to deny or rescind admission based on criminal records that contain one or more convictions for violent or sexual offenses. Additionally, MIAT reserves the right to deny or rescind admission based on incomplete or falsification of information.

Information obtained may only be as accurate as the state and national information on file and may occasionally contain discrepancies. Therefore, prior to starting the background evaluation, applicants are required to read a summary of their rights according to the Fair Credit Reporting Act which will include information on how to dispute any discrepancies indicated in the information provided by state and federal agencies in the completed background evaluation.

Online Course Requirements

To be eligible for study in online coursework, applicants must meet all general admission requirements. Students must also own or have offsite access to a PC or laptop computer that meets program-based requirements, including Internet access. The applicant is responsible for checking hardware/software requirements before enrollment. A print out of the computer system requirements for students enrolled in online courses can be obtained from an Admissions Representative.

Age Requirements

An applicant may begin training beforehand but must have reached the age of 18 prior to the completion of their program.

Vaccine Policy

MIAT does not require a student to have vaccinations to attend classes.
Admission of Disabled Students

MIAT College of Technology does not discriminate against persons with disabilities who can satisfy the MIAT admission requirements and recognizes such person’s right to participate in or benefit from the educational programs offered by MIAT. When necessary, MIAT will make reasonable accommodations to enable students to participate in the programs offered by MIAT. If an applicant or current student has a disability that might require an accommodation, written notice must be given to MIAT so that the disability can be evaluated and reasonable methods for accommodating the disability can be investigated and developed. While MIAT will make every effort to accommodate all disabilities, certain disabilities may not be capable of a reasonable accommodation.

Applicants for admission should notify their Admissions Representative of their disability, complete a Request for Accommodations form and submit any necessary supporting documentation. The Director of Education will evaluate the information presented and determine what reasonable accommodations can be made to enable the applicant to participate in the programs offered by MIAT. A meeting with the Director of Education may be required once the request is submitted. Some accommodations may take time to implement, and thus, applicants must give MIAT notice of their disability sufficiently in advance of their selected start date to enable MIAT to provide a timely accommodation. If MIAT does not receive sufficient advance noticed of a disability, the applicant’s start date may be delayed.

Students who have been attending classes and subsequently need to have a disability accommodated must notify the Director of Education at MIAT and schedule a meeting. The Director of Education will assist in having their disability evaluated and in determining what reasonable accommodations can be made to enable them to continue to participate in the programs offered by MIAT. Some accommodations take time to implement, and thus, students must give MIAT notice sufficiently in advance of the date when an accommodation needs to be made to enable MIAT to make an accommodation that will meet the student’s needs and avoid the interruption of their participation in a program.

MIAT has certain facilities and services available to enable disabled individuals who are otherwise qualified for admission to MIAT to participate in MIAT’s educational programs. The facilities physical accommodations for disabled students include, but are not limited to: disabled student parking, wheelchair ramps for access to the facility, accessibility for disabled students to classrooms, laboratories, the Learning Resource Center, student break rooms, restrooms and support services areas at MIAT. The Canton campus has multiple floors and an elevator is available to facilitate accessibility. If necessary classes may be taught on floors easily accessible for disabled students or some other accommodations will be made.

A student who is not satisfied with the determination made by MIAT for reasonable accommodations and has been unable to resolve the issue through an informal discussion with the Director of Education and/or the Campus President, has the right to appeal the decision. The following steps should be followed to complete the appeal process and file a formal complaint:

The complaint must be submitted in writing, by US mail or by fax to the Campus President. Complaints may not be submitted by e-mail. The appeal must be submitted within ten (10) days of the receipt of the decision. The submission must include:

1. Student’s name, address, e-mail and phone number
2. Date of the complaint
3. A full description of the problem
4. A full description of the efforts that have been made to resolve the issue informally
5. A statement of the remedy requested.

The School Review Board of MIAT will review all pertinent information and may meet with the parties involved. A decision will be made within fourteen (14) days of receipt of the appeal. The Review Board’s decision is final. Any of the above stated deadlines may be extended for good cause. The request for an extension must also be provided in writing.

Transfer and Comparable Credit Policy

Transfer credit

Transfer credit is defined as credit for previous training from accredited or certificated educational institutions. Credit granted will be based upon the presentation of a certified signed transcript of subject hours and satisfactory grades. Credit can only be granted provided the subjects are similar in content to those offered at MIAT.

Granting of credit is at the sole discretion of MIAT College of Technology. Students must complete at least 25% of their program in residency at MIAT College of Technology as the institution awarding the certificate or degree. The remaining 75% of the program may be transfer credit.

Comparable credit

Comparable credit is defined as credit awarded for demonstrated relevant college-level education acquired through non-traditional schooling, work or other life experiences. See the Comparable Credit Handbook for
additional policies and procedures for the granting of comparable credit, available from the training department.

**Credits Accepted by MIAT College of Technology**

For the awarding of transfer credit or comparable credit, MIAT College of Technology reserves the right to administer an evaluation to the student to determine competency of the information or to ensure that the competencies reasonably align with the course work and program into which the credit is to be transferred.

**Transferability of Credits to Other Institutions**

MIAT College of Technology provides information on schools that may accept MIAT’s course credits towards their programs. However, MIAT does not guarantee transferability of credits to any other college, university or educational institution. It should not be assumed that any courses or programs described in this catalog can be transferred to another educational institution.

The decision of whether an educational institution will accept transfer credits is made at the sole discretion of the “accepting institution.” Accordingly, MIAT does not make any representation that credits from MIAT will be transferable to any non-affiliated college or educational institution, nor is any representative of MIAT authorized to make any such representation or promise of transferability.

The student is advised that MIAT accepts no responsibility if credits earned at MIAT will not transfer to another educational institution. It is the student’s responsibility to confirm whether or not credits will be accepted by another educational institution of the student’s choice.

**New Student Orientation**

Prior to the first day of class, new students participate in a group orientation designed to provide an overview of information and resources to assist students in the successful navigation of their college experience. Orientation facilitators will review topics such as student services, employment services, the learning resource system, tutoring services, MIAT’s online learning platform, academic policies, and specific FAA testing policies and procedures.
Career and Student Services

MIAT College of Technology maintains an employment assistance service that is dedicated to developing the careers of its graduates. It also provides employment assistance for current students. While there is no guarantee of employment or a minimum starting salary and no one is authorized by the school to make such guarantees, MIAT provides resources for a successful job search campaigns for graduates.

Graduate Employment Assistance

Graduate employment assistance begins prior to program completion. We provide one-on-one advising, resume development, interviewing techniques and numerous on-campus interview opportunities such as employment presentations and individual employment interviews. At no additional costs, employment assistance is available to all MIAT graduates throughout their careers. Current job opportunities are posted in Canvas with certain specific job leads being communicated directly to graduates by the Employment Advisors. It is important to understand that a large percentage of employment opportunities are not in close proximity to the campus and surrounding metropolitan areas. Therefore, graduates should be willing and able to relocate to maximize their employment potential.

Companies frequently conduct on-campus interviews and employment presentations for students. Occasionally, employers conducting job searches on campus will limit the number of students to interview. The school reserves the right to make interview selections based upon employer requests and requirements. Students should be aware that employers rely heavily upon an individual’s attitude, appearance and attendance records as well as past and present driving, civil and criminal records. These and other factors may seriously affect the school’s ability to assist students in their search for employment.

MIAT and our graduates have established an outstanding reputation with employers. This reputation has been achieved because our students and graduates follow employment policies and procedures based on industry expectations and standards. These policies are in place to help students and graduates be successful in their search for employment. A list of these expectations is published in the Student Handbook under Career Services Expectations, Standards, and Policies. MIAT reserves the right to limit any or all career services, including, but not limited to, exclusion from facilitated employment interviews from any student or graduate failing to follow these policies.

Alumni Retraining

MIAT encourages the pursuit of lifelong learning. MIAT graduates, who have met the graduation requirements listed in the Academic Policies section of this catalog, are welcome to return to campus for retraining throughout their career. Retraining is limited to the program from which the student graduated. Graduates are able to:

1. Audit a class they have already taken
2. Learn about new equipment or software

Availability of courses and labs for retraining are subject to scheduling and space availability. Tuition is free of charge for qualified graduates. Additional fees for laboratory supplies, books, tools, certification testing, etc., may apply. Contact the Director of Education for more information.

Student Employment Assistance

Career Services continually develops and maintains relationships with employers interested in hiring MIAT students for a variety of full-time or part-time positions. Job openings are updated frequently and are posted in Canvas. While this is a cooperative endeavor where students work closely with Career Services, ultimately, it is the responsibility of the student to find and maintain employment, if desired, while attending school.

Veteran Services

MIAT maintains a Veterans’ Services Center on campus to help provide VA benefit resources and funding information, as well as to serve as a liaison between eligible students, Veteran Affairs, and MIAT.

Student Handbook

The Student Handbook is available online at the school’s website and within the student’s Canvas environment. Students should read this handbook prior to the first day of class, as it contains many of the school’s policies on topics including, among others, personal conduct, dress code, safety rules, personal protection equipment, academic integrity, parking, smoking, drug and alcohol abuse prevention, sexual harassment, and policies specific to FAA programs.
Tutoring

We understand that students may occasionally need additional assistance throughout their training at MIAT. We have dedicated facilities and faculty available for individual tutoring and assistance at no additional cost. Students needing assistance should contact their instructor, the LRC Coordinator or a Director of Education.

Learning Resource System

The Learning Resource System is a decentralized system that includes all materials to support a student’s educational experience and enhance their program of study. The components of the system include the Learning Resource Center – “LRC” (technical library), the MIAT Research Database, the Tool Crib, computer labs/work stations providing access to maintenance manuals and simulation software and the school’s learning management system (Canvas) containing instructional materials, study guides and any other materials. The LRC also serves as a tutoring area for students who need extra help. This area is also used for computer-based training and satisfying the time requirements for FAA subjects should make-up be necessary.

Commencement Ceremony

Often referred to as “Graduation,” a commencement ceremony is held approximately two times per year to honor the students projected to successfully complete all of their program’s graduation requirements. Graduates are encouraged to participate in the ceremony. Family and friends are welcome to attend and celebrate the success of their student. The commencement ceremony is coordinated through the Career Services department.

Advising and Community Resources

MIAT College of Technology strongly believes in an open-door policy and encourages students to seek assistance when problems arise. Coping skills, educational and personal advising are available through the Campus President, Director of Education, Career Services staff, and other qualified staff members.

The school maintains community resource referral materials on a variety of topics including transportation, medical services, food pantries, legal resources and utility or homeowner services. In areas in which staff members are not qualified, students will be referred to community organizations or to other facilities with resources available to assist the student.
Financial Aid

MIAT College of Technology has trained officers who assist interested applicants in the completion of documents applicable to the various federal, state and/or private sources of student financial aid. Several financial aid programs are available to those who qualify in order to help students finance their education.

To help a student select the best method or methods for financing their education, the Free Application for Federal Student Aid (FAFSA) should be completed. The FAFSA website is www.fafsa.ed.gov. This application serves as the student’s application for federal student financial aid.

Available resources are then determined based upon a federal needs’ analysis formula. The student’s expected expenses are compared to the Expected Family Contribution (EFC) to determine financial aid eligibility. In the event incorrect or incomplete data is provided, financial aid documentation will be requested.

Upon receipt of a student’s properly completed documentation, changes will be made to the student’s application if necessary. A finance plan can then be developed.

To continue eligibility for financial aid, a student must submit all required financial aid documents each academic year, continue to demonstrate financial need, and

1. Remain in good standing with MIAT;
2. Maintain Satisfactory Academic Progress (“SAP”), and;
3. Not have a drug-related criminal conviction which renders them ineligible.

Students may also, if eligible, receive financial aid from various other state agencies, federal agencies, community scholarships, and organizations. This includes, but is not limited to, veteran and state benefits.

The following are the types of financial aid available to those who qualify:

FEDERAL DIRECT SUBSIDIZED LOAN
Direct subsidized loans are available to undergraduate students with financial need. The U.S. Department of Education pays the interest on a Direct Subsidized loan: (1) while the student is in school at least half-time; (2) for the first six months after the student leaves school (referred to as a grace period); and (3) during a period of deferment.

FEDERAL DIRECT UNSUBSIDIZED LOAN
Direct Unsubsidized loans are available to undergraduate and graduate students; there is no requirement to demonstrate financial need. The amount a student can borrow is determined by the cost of attendance and other financial aid the student may receive. The student is responsible for paying the interest on the Direct Unsubsidized Loan during all periods.

FEDERAL DIRECT PLUS LOAN
Commonly referred to as a parent PLUS loan, a Direct PLUS loan is available to eligible parents of dependent undergraduate students.

FEDERAL PELL GRANT
Federal Pell Grant, unlike a loan, does not have to be repaid. Federal Pell Grants are awarded to undergraduate students who have not earned a bachelor's or a professional degree.

VETERAN BENEFITS
MIAT’s training is approved for federal military and veteran educational benefits. Information regarding applications for veteran’s benefits may be obtained in the Financial Aid Office or from the Department of Veterans Affairs website at www.va.gov. Approval of a student’s eligibility to receive any veteran benefits is within the sole discretion of the Veterans Administration and MIAT has no ability to influence such determinations.

OTHER FINANCIAL AID PROGRAMS
Students may also, if eligible, receive financial aid from various other state agencies, federal agencies, community scholarships, and organizations. These include, but are not limited to, the Bureau of Indian Affairs, Vocational Rehabilitation and Michigan Works. MIAT may be able to provide additional information about these financial aid programs. Students should thoroughly investigate the availability of other sources of financial assistance and should not rely upon MIAT as being their sole source of all information regarding the availability of such programs.

Scholarship Programs

MIAT offers partial grants and/or scholarships for which students may apply. In addition, scholarships in several areas of study are offered through many outside organizations. MIAT maintains information on scholarship opportunities in the Financial Aid department.
12 FINANCIAL AID

Code of Conduct (HEOA)

The Higher Education Opportunity Act (HEOA) requires institutions participating in a Title IV loan program to develop, publish, administer and enforce a code of conduct concerning any type of loan given to a student. The code of conduct applies to the officers, employees and agents of MIAT. The Code of Conduct is published in its entirety on the school’s website: [www.miat.edu/student-services/code-of-conduct](http://www.miat.edu/student-services/code-of-conduct).

Third Party Exam Fees

MIAT will fund the cost of third-party professional licensing exam fees up to the specified maximum amount outlined in Catalog Tuition Supplement. All exam fees are non-refundable. All third-party professional licensing exams must be completed within 120 calendar days from the date of a student’s last regularly scheduled quarter. Student’s failing to complete all exams within the 120-calendar day period will be personally responsible for any and all fees incurred for any exam taken after the 120 calendar days.

Tuition, Books, Tools and Supplies

Tuition, book costs and supplies fees vary from program to program depending upon program length and total credit hours. Accompanying this catalog is a separate schedule of tuition, estimated book costs, tools and supply costs and is referred to as the “Catalog Tuition Supplement.” This catalog is not complete without current addenda/supplements. The current addenda/supplements are available on the school’s website ([www.miat.edu/student-services/student-catalogs](http://www.miat.edu/student-services/student-catalogs)) or from Financial Aid.

A student’s tuition rate will remain unchanged provided the student maintains continuous attendance. Students that drop their program and re-enroll at a later date or those students that choose to postpone their scheduled start date, will be subject to the tuition in effect at the time a new enrollment agreement is executed.

Students may purchase books, tools and training supplies from MIAT or any other vendor. It is the student’s responsibility to have all books, tools and training supplies as needed for training. Students who provide their own tools and/or training supplies must schedule an appointment with the Director of Education prior to completion of their initial course to verify the tools and/or training supplies meet industry standards.

Refund Policies

Any applicant or student may cancel their enrollment by notifying MIAT at any time prior to or during training. Notification should be in writing.

Additionally:

1. If an applicant provides written notification to the school within three (3) days of the date of signing the Enrollment Agreement that he/she does not intend to enter school, all monies paid will be refunded within thirty (30) days of that notification.

2. An applicant who cancels their enrollment more than three (3) days after the date of signing the Enrollment Agreement but before starting classes, will receive a refund within thirty (30) days of all monies paid with the exception of the application fee.

3. If an applicant is denied admission to the school for any reason, all monies paid by the applicant will be refunded within thirty (30) days of the denial.

4. Applicants who have not visited the school facility prior to enrollment will have the opportunity to withdraw without penalty within three (3) days following either attendance at a regularly scheduled orientation or following a tour of the school facilities and inspection of equipment. Any monies paid will be refunded within thirty (30) days.

5. Once a student has started classes, refunds will be made to the student or private assistance program(s) within thirty (30) days from the date of determination of the last day of attendance or to Title IV Federal Student Aid programs, as identified below, within forty-five (45) days from the date of determination of the last day of attendance.

6. In cases where a student does not return from an approved leave of absence, refunds will be made using the documented date of the student’s expected return to school from that leave of absence. Refunds will be made to the student or private assistance program(s) within thirty (30) days from the date that the student was expected to return to school and to Title IV Federal Student Aid programs, as identified below, within forty-five (45) days from the date of the student’s expected return to school.
Refunds for any student who withdraws from MIAT College of Technology before the end of any quarter are determined in accordance with the following refund policies:

- A student who officially withdraws during the first calendar week of the quarter is responsible for 25% of the tuition and fees for that quarter.
- A student who officially withdraws during the second calendar week of the quarter is responsible for 50% of the tuition and fees for that quarter.
- A student who officially withdraws during the third calendar week of the quarter is responsible for 75% of the tuition and fees for that quarter.
- A student who officially withdraws during the fourth calendar week or thereafter is NOT entitled to a refund of tuition or fees for that quarter.
- Application fee is NON-REFUNDABLE after the start of the program.

Tools and books delivered to the student become the property and responsibility of the student. Tools and books are not returnable or refundable once received by the student.

Withdrawals

A student may request to be withdrawn from a class at any time. The staff and administration at MIAT strongly recommends against students disrupting their training scheduled for any reason. However, upon presentation of any reasonable request to the Director of Education, Director of Financial Aid, or Campus President, a withdrawal may be granted. The student’s withdrawal date will be the date the request for withdrawal is made.

Additionally, if a student does not attend class and fails to notify the school of their intentions within fourteen (14) calendar days of their last day of attendance, they will be withdrawn. The student’s withdrawal date will be the date fourteen (14) calendar days following their last day of attendance.

A student who withdrawals during a course must retake that course. Additional tuition and all attendance policies apply. All students returning from a withdrawal will be subject to a re-enrollment process, which may include a review by the Admissions Committee. The return of any student to MIAT after a withdrawal will be subject to class availability.

Return of Non-Title IV Funds

After the Institutional Policy has been applied, any excess non-title IV funds will be returned to the student or the appropriate agency within 30 days of the date of determination.

Return of Federal Title IV Funds

All MIAT College of Technology students receiving Federal Title IV grants and loans who withdraw will be subject to calculation of earned funds up through the 60% point in the quarter. All unearned Title IV grants and loans will be returned to the appropriate program (Pell Grant, Direct Subsidized and Unsubsidized Loans and Plus Loans). If the withdrawal occurs after the 60% point in the quarter, then the percentage of aid earned is 100%.

To calculate the amount of Title IV funds not earned by the student, the school must determine the last date of attendance. If a student withdraws before the 60% point (day specific), the school will calculate the percentage of financial aid NOT earned by the student and return the funds to the appropriate program.

Example:  
Ten-week Quarter = 70 calendar days  
60% point = 42 calendar days

Students must be aware if they withdraw from their program the school must calculate the required R2T4 Federal refund policy and the student may owe the school for charges that may have been previously covered by Federal Financial Aid.

Allocations of any Title IV refunds, in accordance with federal regulations, shall be made in the following order: Federal Direct Unsubsidized loan, Federal Direct Subsidized loan, Federal Plus loan, Federal Pell Grant, Private Assistance and then the student.

Per Federal regulations all Title IV refunds must be returned to the originator within forty-five (45) days of the student’s withdrawal date.

If a student withdraws from school at or before the 60% point the student may have a BALANCE DUE to the school.
14 FINANCIAL AID

Post Withdrawal Disbursement

Within thirty (30) days of the date of determination of withdrawal, MIAT will provide written notification of any post withdrawal disbursement eligibility, if outstanding charges to the student’s account exist. If a student withdraws and did not receive all of the funds that they earned according to the federal refund calculation, the student and/or PLUS loan borrower will be notified by MIAT that they are eligible for a post-withdrawal disbursement.

- If the post-withdrawal disbursement includes loan funds, the borrower has the opportunity to accept or decline the funds within fourteen (14) days of notification before the loan funds can be disbursed. If notification of acceptance is received later than fourteen (14) days, no post withdrawal disbursement will be made unless approved by MIAT. The borrower will be notified of the decision in writing.

- If the borrower chooses to have any loan funds disbursed, the borrower is obligated to repay the loans to the federal government in accordance with the Master Promissory Note on file. These funds will be made promptly to the student’s account but, no later than 180 days.

- If the school does not receive confirmation back from the borrower, no loan funds will be directly disbursed to the borrower unless the school agrees.

- MIAT may disburse grant funds without the student’s permission under a post-withdrawal disbursement.

Cost of Education

The Cost of Education will include direct expenses such as tuition, fee, books and supplies. There are also indirect costs such as room and board, transportation and personal expenses.

The following national standardized budgets reflect the estimated indirect costs associated with the courses offered at MIAT. You may find your expenses differ, but these standard budgets should assist you with planning. Figures are shown at a cost per month.

<table>
<thead>
<tr>
<th></th>
<th>At Home</th>
<th>Away from Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room/Board</td>
<td>$429</td>
<td>$1,186</td>
</tr>
<tr>
<td>Transportation</td>
<td>$179</td>
<td>$179</td>
</tr>
<tr>
<td>Personal*</td>
<td>$450</td>
<td>$450</td>
</tr>
<tr>
<td>Indirect Costs</td>
<td>$1,124</td>
<td>$1,832</td>
</tr>
</tbody>
</table>

*i.e. clothing, laundry, personal care, recreation*
Academic Policies

Grading System

The final grade for any course is determined by theory grades and lab grades. Theory grades consist of test and quizzes. Lab grades consist of labs, competency-based projects, homework and any other criteria indicated in the course syllabus. The academic standing of all students is based on the following scale with 4.0 being the maximum grade point possible and 1.7 the minimum passing grade point.

<table>
<thead>
<tr>
<th>Numerical Value</th>
<th>Letter Grade</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>94-100</td>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>90-93</td>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>87-89</td>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>84-86</td>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>80-83</td>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>77-79</td>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>74-76</td>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>70-73</td>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>0-69</td>
<td>F</td>
<td>0.0</td>
</tr>
</tbody>
</table>

F  A student receiving the grade of F will be assigned a numerical grade of 69% and must retake the failed course and receive a passing grade in theory and lab. Additional tuition and fees will apply. The failed course must be retaken in a timely manner determined by the Director of Education.

R  Course was repeated, and no credit awarded.

W  Withdrawn

CR  Transfer Credit or Comparable Credit

L  Leave of Absence

WM  Withdrawn Military

Final Grade Appeals

Students must first attempt to settle the matter informally. This should be done by discussing the issue with the instructor. The instructor has seven (7) business days after the end of the course to make changes to the student’s grade. If, and only if, these informal procedures have failed to settle the matter, the student may initiate MIAT’s formal Grade Dispute procedures as outlined in the Student Handbook. Only a final course grade may be appealed.

GPA and CGPA Calculations

A Grade Point Average (GPA) is calculated for all students. The GPA for each term and Cumulative Grade Point Average (CGPA) are calculated on courses taken at MIAT. The GPA for each term is calculated by the total quality points earned that term by the total cumulative credit hours for that term. The CGPA is calculated by dividing the total cumulative quality points earned by the total cumulative credits attempted for the GPA. The number of quality points earned for each course is determined by multiplying the points listed for each letter grade by the number of credits of the course. Grades of “W”, “R”, “WM” and “CR” do not enter into GPA calculations.

Satisfactory Academic Progress Policies

All students attending MIAT must maintain satisfactory academic progress (SAP) regardless of their enrollment category (certificate or degree). Generally, the quantitative and qualitative standards used to judge academic progress include all quarters of the student’s enrollment. Even quarters in which the student did not receive Title IV program funds must be counted. Note: MIAT does not offer noncredit remedial coursework.

A student’s academic progress is measured at the end of every quarter. Any student that has not met the minimum pace of completion, CPGA, and/or completion of their program within the 150% of the planned program length, will be placed on academic/financial aid warning (please see below for more information). To maintain satisfactory academic progress, a student must comply with all requirements of this policy. The following standards determine a student’s satisfactory academic progress:

1. Qualitative standard – A minimum cumulative grade point average (CGPA) is required for all coursework attempted. Grades of W, R, WM and CR do not enter into GPA calculations. Please see the chart below for details.

2. Quantitative standard – A minimum pace of completion is required of all courses attempted. This is measured by dividing the cumulative credits earned by the cumulative credits attempted. Grades of W, R, and WM count as attempted credits but not as earned. For example, a student who has taken 36 credits must have completed at least 66.67% of those credits, which are 24 credits (36 X 66.67% = 24). Please see the chart below for details.
3. Maximum Time Frame – Attempted credits may not exceed 150% of the number of credits required for a student’s program of study. The limit will vary for each program. Please refer to each individual required program length. For example, the Airframe and Powerplant Technician Program requires 110 credits to graduate; therefore, a student enrolled in this program cannot exceed 165 credits attempted (110 credits X 150% = 165 credits). Grades of W, R, WM and CR count as attempted credits towards completion. Credit for previous training (grade(s) of CR) that are applied to a student’s program at MIAT will be counted as both credits attempted and completed.

For a student who changes programs or pursues a second certificate or degree, the credits attempted, and grades earned that do not count toward the student’s new program will not be included in the calculation of a student’s satisfactory academic progress standing.

Pace of Completion

Generally, the quantitative and qualitative standards used to judge academic progress include all terms of the student’s enrollment. Even terms in which the student did not receive Title IV program funds must be counted.

Grades of “W”, “R”, “WM” and “CR” count as attempted for minimum pace of completion. For credit for previous training, “CR”, the calculation of a student’s satisfactory academic progress standing will include only those credits that apply toward the current program. Credit hours from another institution that are accepted toward the student’s educational program must count as both attempted and completed hours.

However, for a student who changes programs or pursues a second degree, the credits attempted, and grades earned that do not count toward the student’s new program will not be included in the calculation of a student’s satisfactory academic progress standing.

Academic/Financial Aid Warning

Academic/financial aid warning means a status assigned to a student who fails to make satisfactory academic progress. A student on academic/financial aid warning may continue to receive Title IV program funds for one payment period. While on academic/financial aid warning a student must be able to meet standards for the next evaluation point. Failure to meet these standards will mean dismissal from school unless an appeal is granted. A student who successfully meets the next evaluation point standards will be removed from academic/financial aid warning status.

SAP – Appeal Process

Students may appeal the determination that they are not meeting satisfactory academic progress standards while on academic/financial aid warning by petitioning the College for reconsideration of the student’s eligibility for Title IV program funds.

Basis for Appeal – Extenuating Circumstances

Extenuating circumstances include but are not limited to:

- illness of the student or death in the student's immediate family
- unavoidable conditions arising in connection to the student's employment, such as geographical transfer or change in hours or conditions of employment
- immediate family or financial obligation beyond the control of the student
- unanticipated legal or military obligations of the student beyond the control of the student.

All extenuating circumstances must be documented to the satisfaction of the school.

Submitting an Appeal

The student must provide the following to a Director of Education:

1. A written explanation of why the student failed to meet the standards
2. A written explanation of what has changed in the student’s situation that will allow the student to successfully pass the course.
3. A written request to be placed on academic probation.

If the submitted appeal is denied, the student is not enrolled and is not eligible to receive Title IV funds. If a student does not understand the appeal decision, they can contact the President. Students with successful appeals are placed on Academic/financial aid probation.

Academic/Financial Aid Probation

Academic/financial aid probation means a status assigned to a student who fails to make satisfactory academic progress and who has successfully appealed and has been reinstated.
While on probation, a student must be able to make the standards for the next evaluation point or meeting the requirements of the academic plan developed by the school and the student. Failure to meet these standards will mean dismissal from school. A student who successfully meets the requirements at the next evaluation point will be removed from probation status.

**Incomplete Coursework**

Students are required to satisfy any incomplete coursework which may include tests and labs. Missed exams can be scheduled and taken in the Learning Resource Center; incomplete lab assignments will be reviewed by the Instructor. Incomplete assignments, labs, and/or exams may result in the student receiving a grade of “F” for the course.

**Re-establishing Eligibility**

A student who has been dismissed due to lack of satisfactory academic progress may appeal to be reconsidered for readmission to the school in the same program. At the sole discretion of the school, a student may be readmitted only if the school determines that there is a reasonable expectation that the student will satisfactorily complete their program based upon the student’s written appeal. The basis for appeal shall include any extenuating circumstances that resulted in the student failing to meet satisfactory academic progress.

If approved, the student will be enrolled for a probationary period not to exceed the next evaluation point. With respect to Title IV program funds, a student must complete the probationary period with the minimum satisfactory completion required and numerical grade average required as outlined under satisfactory academic progress.

Before applying for readmission, all financial obligations to the school must be satisfied. Students who retake a portion of the program will be charged current tuition and fees. The student will be dismissed if they fail to meet all satisfactory academic progress standards after the probationary period.

**Distance Education**

MIAT offers distance education for certain courses. All distance education courses are designated with the symbol ★ next to the Course Number in the Programs of Study section of this catalog. For information on a specific distance education course or any hardware and/or software requirements, please see an Admissions Representative.

Students enrolled in distance education courses will have the same access to services traditionally provided on campus including, but not limited to, the Learning Resource System, academic advising, career services, financial aid counseling and student services.

All academic policies (i.e. grading, course evaluation, admission requirements, satisfactory academic progress, etc.) apply to all courses offered through distance education. The ability of MIAT to offer the designated courses via distance education is subject to demand and scheduling. Courses may be offered on campus and/or via distance education.

**Class Size**

The maximum class size is thirty (30) students per instructor with the following exceptions: FAA Part 147 (Aviation Maintenance Technical Schools) states that up to twenty-five (25) students per one instructor in a lab setting unless a lab assistant or another instructor are present. In general, the minimum class size for the General Education courses held onsite is ten (10) students and the maximum class size for the General Education courses online is (30) thirty students.

**Class Availability**

There are many factors that affect the scheduling of classes. MIAT strives to accommodate the scheduling needs of all students. However, MIAT cannot promise or guarantee the availability of any class and specifically reserves the right in its sole discretion to cancel any class, change room or location, dates, times or otherwise change the availability of any class.

**Course Repetitions**

MIAT permits students to retake a course a maximum of two additional times. When a student retakes a course, the new grade achieved is recorded and substituted for the previous grade. The new grade is then included in the CGPA calculation. Course repetitions are included in satisfactory progress maximum time for completion calculation. The record of the repeated course remains part of the transcript and is identified as an "R" for repeated course. Additional tuition will be charged.

**Failure to pass any course on the third attempt will result in dismissal. For clock hour programs there is no additional Title IV aid for course repetitions.**

**Auditing a Course**

A student may audit one or more courses with the approval of the Director of Education. School policies on grades and attendance do not apply. Standard tuition may apply.
School Hours

Classes are offered on average 4-days per week. Generally, Monday through Thursday (See Academic Calendar). Classes meet between 7:30 am and 2:00 pm for the Day classes and between 4:00 pm and 10:30 pm for Afternoon aviation, energy, 4:00 – 10:00 for electro-mechanical and welding classes and 5:00 pm to 11:00 for HVACR classes.

Clock Hour

A clock hour is defined as the equivalent of: a) a 50-minute class, lecture, recitation, or b) a 50 -minute faculty supervised laboratory, shop training or approved field trip.

School Closings

In the event of inclement weather or other circumstances out of the school’s control, MIAT may close training operations. The closure of the day program will be announced no later than 5:30 a.m. on the morning of the incident/bad weather. The closure of the afternoon program will be announced no later than 1:30 p.m. that afternoon.

The school will make every attempt to broadcast this information to students via social media outlets and text messaging. Local television and radio stations may also carry school closure information for weather related events.

School closure due to inclement weather or other circumstances out of the school’s control will cause the course to be extended.

FAA Certification

Students who graduate from programs certificated by the Federal Aviation Administration (FAA) at MIAT are qualified to apply for a federal certification in their field of study. In order to secure this certification, applicants must pass written, oral and practical examinations. These examinations are administered by an FAA designated third party. A fee is charged at the time of the examination.

Attainment of all FAA certification is not a requirement for graduation from MIAT, since certification cannot be fully accomplished until after the student has completed all of the FAA required subject areas. However, it is school policy that all aviation maintenance students (certificate or degree) pass the FAA oral, practical, and written examinations for General and Airframe (or General and Powerplant, as applicable, in alternate course scheduling arrangements) prior to advancing to their final quarters of study in the section that has not been completed (Airframe or Powerplant).

The FAA tests must be passed by the end of the next full quarter after completing the final course in Airframe or Powerplant (as applicable). The Vice President of Education or Director of Education may grant an extension to the deadline for completion of these exams, (extension not to exceed two (2) calendar weeks). If testing is not completed by the deadline, training will be stopped and the student will be unable to advance to the final quarters of study and may be withdrawn from the program.

Students are advised, MIAT has a special exemption from the FAA that allows students to take their General written exams upon completion of all General (Air Science) courses as long as the student does not owe any makeup time. It is highly recommended that students take advantage of this exemption so that they are on track to complete all FAA testing on time.

Early FAA Oral and Practical Examinations

In accordance with FAR 65.80, whenever MIAT demonstrates to an FAA inspector that any student has made satisfactory progress at the school and is prepared to take the oral and practical tests prescribed by FAR 65.79, that student may take those tests during the final subjects of training in the approved curriculum, before meeting the applicable experience requirements for FAR 65.77 and before passing each section of the written tests prescribed by FAR 65.75.

A student may request to take their oral and practical exams before completion of the written exams. To qualify for early oral and practical testing, a student must have a cumulative numerical grade average of at least 2.0 CGPA, all makeup time completed, and receive approval from the Director of Education.
Students wishing to take an early oral and practical exam must submit a MIAT’s Request for Early Testing form at least sixty (60) days before the completion of their approved curriculum. Early oral and practical exams must be completed prior to the student’s last day of scheduled training.

**Privacy of Student Records (FERPA)**

The Family Educational Rights and Privacy Act (FERPA) afford students certain rights with respect to their education records. They are:

**The right to inspect and review the student’s education records within 45 days of the day the school receives a request for access:** Students should submit to the Student Records department written requests that identify the record(s) they wish to inspect. Student Records will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by Student Records, the representative from that department shall advise the student of the correct official to whom the request should be addressed. If it is necessary to furnish a copy of the student’s records, a fee may apply.

**The right to request the amendment of the student’s education records the student believes is inaccurate or misleading:** Students may ask the school to amend a record that they believe is inaccurate or misleading. The student should write the Campus President clearly identifying the part of the record they want changed and specify why it is inaccurate or misleading. FERPA is not intended to provide a process to be used to question substantive judgments, which are correctly recorded. The rights of challenge are not intended to allow students to contest, for example, a grade in a course because they felt a higher grade should have been assigned. If it is the decision of the school not to amend the record as requested by the student, the school will notify the student of this decision and advise the student of the right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

**The right to consent to disclosures of personally identifiable information contained in the student's education records, except to the extent that FERPA authorizes disclosure without consent:** Generally, MIAT College of Technology must have written permission from the parent or eligible student in order to release any information from a student's education record. However, FERPA allows schools to disclose those records, without consent, to the following parties or under the following conditions (34 CFR § 99.31):

- School officials with legitimate educational interest;
- Other schools to which a student is transferring;
- Specified officials for audit or evaluation purposes;
- Appropriate parties in connection with financial aid to a student;
- Organizations conducting certain studies for or on behalf of the school;
- Accrediting organizations;
- To comply with a judicial order or lawfully issued subpoena;
- Appropriate officials in cases of health and safety emergencies; and
- State and local authorities, within a juvenile justice system, pursuant to specific State law.

A “school official” is:

(1) a person employed by MIAT College of Technology in an administrative, supervisory, academic, research or support staff position (including security personnel); or

(2) a person, company, partnership or other entity with whom MIAT College of Technology is affiliated with or has contracted with as its agent to provide a service instead of using MIAT College of Technology employees or officials (e.g. attorney, accountant, auditor, collection agent, Title IX Coordinator, etc.). A school official has a “legitimate educational interest” if the school official needs to review an education record or records in order to fulfill his/her/its professional responsibilities for MIAT College of Technology.

The following categories of information are designated as “directory information”:

- Name
- Program(s) Undertaken
- Address
- Date of Attendance
- Telephone Number
- Certificate Awarded
- Date and Place of Birth
MIAT College of Technology may disclose any of these items at its discretion, without the prior consent of the student, unless the student provides written notice to the Student Records Office objecting to the disclosure of all or part of the directory information within thirty (30) days after enrollment. Any written notice from a student objecting to the disclosure of directory information shall be effective as of the date the written request is received by the Student Records Office unless and until rescinded in writing by the student.

The right of the student to file a complaint with the U.S. Department of Education concerning alleged failures by MIAT College of Technology to comply with the requirements of FERPA.

Please direct inquiries or complaints to:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue SW
Washington D.C. 20202-4605

Privacy for Educational Records of Graduates

Although MIAT is under no obligation to maintain the privacy of educational records under FERPA for a graduate of the school, MIAT has adopted an internal policy to restrict the release of all information for a graduate other than to confirm/verify the date of graduation unless the school has obtained a written release from the graduate to release identified information for a specific purpose (i.e., information requested by a prospective employer).

Graduation Requirements

To be classified as a graduate from their program of study, the student must have a minimum cumulative grade point average of 2.0 and have successfully completed all required courses. Successfully completed means that a student has received a course grade point of 1.7 or higher. Graduates who are free from all indebtedness to the school will be issued a certificate or degree in their program of study.

Graduates who have received their certificate or degree from programs that involve curriculum approved by the Federal Aviation Administration (FAA) must have made up all missed time in such curriculum per class attendance and absenteeism policies in order to qualify for FAA written, oral, and practical examinations. Graduates with all missed time made up will be issued an FAA Certificate of Completion which is authorization for the graduate to apply to the FAA for testing.

Prior to graduation, the pending graduate is required to attend the mandatory graduation clearance session. All individual department requirements must be met in order for Student Records to issue a student’s program certificate or degree.

Class Attendance and Absence Policy

MIAT believes that regular and punctual attendance is important to achieve a high standard of work and students are expected to notify the school if they must be absent.

A student enrolled in a program certificated by the Federal Aviation Administration must make up absences by attending regularly scheduled make-up sessions and will be charged an additional hourly charge for these sessions.

Any student enrolled in MIAT who accumulates more than 20% unexcused hours or more than 50% of the total required hours in any course will receive an “F” for that course. The student must continue in the next scheduled course to be considered active. Failure to return to the next scheduled course of instruction for any reason, may result in the withdrawal of the student from school and the student will be classified as inactive.

Students must attend each scheduled course in their program of study. In the event a student fails to attend their scheduled course, MIAT will make every effort to provide an opportunity for the student to take that course at a later time; however, the appropriate federal and state tuition refund formulas may be applied which could result in a return of financial aid and/or tuition due from the student.

If a student does not attend or fails to notify the school of their intentions within ten (10) days of their last day of attendance, they will be withdrawn.

Make-Up Time – FAA Certificated Programs

It is recommended that all required make-up time be completed prior to entering the next quarter. An excessive accumulation of missed time that is not made up may result in warning and/or suspension of training.

Make-up time is free of charge if the time is made-up by the end of the quarter following when the time is missed. Make-up hours are charged at the rate of $3.00 per hour for any make-up time required that is not made up by the end of the following quarter.

Students must have verification of time missed (either an Absence Verification form for time missed during the current course of instruction or a Detailed Attendance Report for previous courses of instruction) and obtain a complete a Make-Up Receipt prior to making up time. The
instructor will check the documentation and issue a project(s) to be completed during the session. It is the student’s responsibility to have the tools and books required. Failure to complete and submit the assigned project(s) will result in no make-up credit.

**Excused Absences**

In very limited circumstances a student may request an excused absence from the instructor. The time missed during an excused absence will not count toward the maximum missed time allowed in a course. However, if the time missed is in an FAA approved section, this time must be made up and the student is responsible for all missed material. The following requirements apply:

- Excused absences may be granted at the discretion of the instructor.
- The reason for the excused absence must be documented to the school’s satisfaction. Examples of this documentation would include a doctor’s note (illness), letter from funeral home showing attendance (immediate family member’s death), letter of attendance at court/lawyer (legal obligation), or copy of orders (military obligation).
- Providing false documentation in an effort to obtain an excused absence may result in dismissal from the program.

In extenuating circumstances, requests for an excused absence may be brought to the attention of the Director of Education for review.

**Attendance Taking Procedures**

Attendance is taken at the beginning of each 50-minute session. Attendance will also be taken immediately prior to lunch and at the end of the day.

**Tardiness Policy**

There are several class periods each regularly scheduled day. It is the student’s responsibility to be in class at the beginning of each period. If a student enters class after the start of any period, the student is considered tardy. Any time lost due to tardiness will be recorded as an absence, and the policy on Class Attendance and Absence applies.

**Early Departure from Class**

Early departures from any class are counted as periods of time missed. Students are required to notify their Instructor or designated administrator when leaving before the end of the scheduled day by completing the Request for Early Departure from Class form. Students leaving prior to the end of a scheduled class day without submitting the Request for Early Departure from Class form, will receive credit for attendance up to the last verified time of attendance.

**Leave of Absence**

A Leave of Absence (LOA) is a temporary interruption in a student’s program of study and may have a serious impact on a student’s financial aid. Any student considering requesting a Leave of Absence that receives financial aid, should consult with a Financial Aid Officer to determine how their financial aid may be affected. The following criteria outlines the requirements to process an approved Leave of Absence:

1. The student must submit a written, signed and dated request to a Director of Education or that includes the reason for the request prior to the leave of absence.
2. A Leave of Absence cannot be granted for academic reasons (i.e. to keep a student from failing). The following list outlines the acceptable reasons for Leave of Absence requests:
   - Medical (self or immediate family)
   - Military Service
   - Jury Duty
   - Other exceptional situations as determined and approved by the campus President
3. The period of the Leave of Absence may not begin until the student has submitted, and the school has approved a written and signed request for an approved Leave of Absence.
4. If unforeseen circumstances prevent a student from providing a prior written request, the school may grant the student’s request for a leave of absence if MIAT is able to collect the written request at a later date (normally within two weeks) and is able to document the unforeseen circumstances that prevented a written request prior to granting the leave. In these cases, the beginning date of the leave of absence can be no earlier than the date that the circumstances prevented the student from attending school.
5. Leaves of Absence are not automatically granted. A Leave of Absence may be granted only if the school determines, at its sole discretion, that there is a reasonable expectation that the student will return to classes and satisfactorily complete their program.
6. Leaves of Absence are normally not granted for longer than one quarter.

A Leave of Absence cannot exceed 180 days in any 12-month period. The school may, at its sole discretion, grant more than one leave of absence provided that the combined leaves of absence do not exceed 180 days within the 12-month period and that each leave of absence is properly
requested by the student in accordance with the school’s policy and standards as stated above.

Any student who is granted a Leave of Absence is eligible to return to school with no additional charges associated with that Leave of Absence. Upon return, the student must resume training at the same point in the academic program that he or she began the Leave of Absence. If additional courses are added to the student’s program because of curriculum changes all additional charges will apply.

Failure to return to school on or before the scheduled Leave of Absence return date will result in the student being withdrawn from school.

If a student is a Federal Title IV loan recipient, the failure to return may have significant adverse consequences on loan repayment terms, including exhaustion of some or all of the student’s grace period.

Professional Conduct and Appearance

All students are expected to maintain the high standard of professional conduct and appearance that is required by industry and is a tradition at MIAT. Both in and out of school, students are expected to conduct themselves in a professional manner with pride in themselves, their community and their school.

The dress code regulations reflect industry standards for promoting professionalism and safety. Through professional conduct and appearance observed on campus, our students and graduates have established an outstanding reputation among industry employers and the public. It is expected that the student will observe the code of conduct of MIAT College of Technology. The current Student Handbook contains the rules and policies on student conduct, safety rules and dress code to which students must adhere.

All students are issued five approved MIAT College of Technology shirts. These shirts are required attire while attending any activities at MIAT.

MIAT reserves the right to place students on academic or professional warning, probation, suspension or dismissal from school for failure to conduct themselves in a professional manner. Violations include, but are not limited to, the following:

1. Failure to maintain acceptable academic achievements. Please refer to Academic Policies criteria detailed in this catalog.
2. Excessive absences from scheduled training.
3. Possession, conviction or under the influence of alcohol or controlled substances.
4. Unprofessional conduct found to be offensive or detrimental to the individual, community, school, or to other students.
5. Dress, grooming and personal habits that are not proper for a professional person.
6. Disrespectful or insubordinate behavior toward any employee, guest or visitor.
7. Failure to adhere to policies and regulations stated in the student handbook.

Any student who is placed on academic or professional conduct warning, probation, suspension or dismissal may request a review in writing to:

School Review Board  
c/o MIAT College of Technology  
2955 S. Haggerty Road  
Canton, MI  48188

Comprehensive Student Complaint and Dispute Resolution System

Primary Resolution System

MIAT is dedicated to the professional and technical development of its students. To ensure each student is afforded fair, nondiscriminatory treatment, MIAT has developed policies to govern student professional conduct, academic performance and administrative actions.

MIAT has created a primary resolution system to facilitate the resolution of any concern or complaint with MIAT, including the process of recruitment and enrollment, the educational process, financial matters and placement assistance. If you are not satisfied with the results, you have the right to pursue further action through arbitration (Secondary Resolution System).

If the student has any concerns or complaints, they should be first addressed informally with your classroom instructor or if it is not an instructional issue, with the appropriate MIAT staff member. In many cases, issues are resolved at this informal level. If that approach does not resolve the concerns, a formal primary resolution process begins by presenting a written description of your complaint to the Director of Education or Campus President.

The written complaint, which should be on the MIAT College of Technology Complaint Form, must include as much information as possible to assist in addressing the concern, and must include a statement of actions needed to resolve the matter. The complaint must be signed and dated by the student and must include a valid address and telephone number. A copy of the Complaint Form is available from the Campus President. The complaint should be submitted within fourteen (14) calendar days of the
incident giving rise to the complaint, or after attempts to informally resolve the matter have ended, whichever is later.

A written response from the Director of Education or Campus President will be provided to the written complaint. If the student is dissatisfied with this response, he or she may appeal the decision to the School Review Board. The appeal must be in writing and submitted within 14 calendar days of the student’s receipt of the written response to his or her complaint.

A student who is placed on academic or professional conduct warning, probation, suspension or dismissal may request review of the decision:

School Review Board  
c/o MIAT College of Technology  
2955 South Haggerty Road  
Canton, MI 48188

The request for review must be made within fourteen (14) days of the warning, probation, suspension or dismissal. The request must be in writing and signed by the individual. The request for review must contain the reasons for the academic, attendance or conduct violation. In addition, the student’s plan to comply with the academic, attendance or conduct policy must be stated. The request must provide current student contact information, including a valid address and telephone number.

In summary, if a student has any questions, concerns or complaints, MIAT College of Technology recommends that he or she adhere to the following process for seeking assistance:

**Level 1:** Assistant Director of Education, Instructor or appropriate MIAT staff member (through informal means)

**Level 2:** Director of Education, Vice President of Education or Campus President (through written complaint)

**Level 3:** School Review Board (for review of any disciplinary decision or review of a Level 2 response to any written complaint)

**Secondary Resolution System (Arbitration)**

Any disputes or controversies between the parties to this agreement, arising out of or relating to the student’s recruitment, enrollment, attendance, education or placement by MIAT College of Technology or to this agreement, shall be resolved by binding arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association in effect at the time of the dispute or controversy, or in accordance with procedures that the parties agree to in the alternative. The Federal Arbitration Act and related federal judicial procedure shall govern this agreement to the fullest extent possible, irrespective of the location of the arbitration proceedings or of the nature of the court in which any related proceedings may be brought. Arbitration shall be the sole remedy for the resolution of any disputes or controversies between the parties to this agreement. Arbitration shall take place before a neutral arbitrator in the locale of MIAT attended by the student unless the student and MIAT agree otherwise. The arbitrator must have knowledge of and actual experience in the administration and operation of postsecondary educational institutions unless the parties agree otherwise.

Note: It is understood and agreed that a student must complete and follow the Primary Resolution System procedures first, then, if necessary, follow the Secondary Resolution System procedures.

**Student Complaint/Grievance Procedure**

Colleges accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC) must have a procedure and operational plan for handling complaints. If a student does not feel that the college has adequately addressed a complaint or concern, the student may consider contacting ACCSC. All complaints considered by the Commission must be in written form, with permission from the complainant(s) for the Commission to forward a copy of the complaint to the college for a response. The complainant(s) will be kept informed as to the status of the complaint, as well as the final resolution by the Commission. Please direct all inquiries:

Accrediting Commission of Career Schools and Colleges  
2101 Wilson Boulevard, Suite 302,  
Arlington, VA 22201,  
(703) 247-4212 or online at www.accsc.org

A copy of the Commission’s Complaint Form is available at MIAT College of Technology and may be obtained by contacting the Campus President.

Michigan residents may also write to:

State of Michigan – Executive Director  
Department of Licensing and Regulatory Affairs  
201 N. Washington Square, 2nd Floor  
Lansing, MI 48913 ♦ (517) 335-5858.

Ohio residents may also write to:

State Board of Career Colleges and Schools  
Executive Director  
35 Gay Street, Suite 403,  
Columbus, OH 43266 ♦ (614) 466-2752
This page has been left blank intentionally
Aviation Maintenance Technology-AAS (Degree – Associate in Applied Science)

The Aviation Maintenance Technology program is a combination of classroom and hands-on instruction and outside work/homework. Upon completion of this FAA (Federal Aviation Administration) certificated program, graduates are eligible to apply and test for the Airframe and Powerplant FAA Certification that is nationally recognized. Upon certification, graduates also possess industry-recognized certificates and are prepared to enter various career areas of the aviation industry at an entry level. Career options include, but are not limited to, **Commercial Airlines, Corporate Aviation, Helicopters, Unmanned Aircraft Systems, General Aviation, Manufacturing, Repair and Overhaul and Avionics.** A sample of entry-level careers include: Airframe Technician, Powerplant Technician, Aircraft Restoration, Jet Engine Mechanic, Avionics Technician, Avionics Installer, Engine Manufacturing, Structures Technician, Line Service Technician, Ramp/Ground Service Agent, Ground Service Equipment Mechanic, Structures Technician. There are some limitations for career options without the FAA Airframe and Powerplant Certification. Graduates can also secure entry-level positions in other technical areas such as: **Manufacturing Production** (Electrical, Hydraulics/Pneumatics Technician, Maintenance Technician, Sheetmetal/Composite Technician), **Engine and Other Machine Assemblers** (Engine Assembly/Builder, Fuel Injection Technician, Dynamometer Technician, Maintenance Technician, Mechanical Technician, Testing Technician, Turbine Mechanic, Turbine Technician) and **Electrical/Electronics** (Control Technician, Instrument Repair Technician, Electronics Technician, Field Service Technician, Service Technician). Additionally, the general education courses expand and enhance non-technical skills important to the career growth and development of graduates of this program.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIR SCIENCE (GENERAL) SECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS101-5 Learning Strategies, Human Factors and History</td>
<td>42</td>
<td>2.0</td>
</tr>
<tr>
<td>AS102-5 Math</td>
<td>24</td>
<td>1.5</td>
</tr>
<tr>
<td>AS103-5 Physics</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS104-5 Weight and Balance</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>AS105-5 Drawings</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>AS106-5 FAR’s, Maintenance Publications and Limitations</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AS107-5 Tools, Safety and Ground Operations</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AS108-5 Fluid Lines and Fittings</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>AS109-5 Cleaning and Corrosion</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS110-5 Materials and Processes</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS111-5 Non-Destructive Testing</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS112-5 Basic Electricity I</td>
<td>42</td>
<td>2.5</td>
</tr>
<tr>
<td>AS113-5 Basic Electricity II</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AS114-5 Basic Electricity III</td>
<td>42</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>AIRFRAME SECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF201-5 Basic Sheetmetal and Welding Familiarization</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>AF202-5 Principles of Troubleshooting</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AF203-5 Non-Metallic Structures</td>
<td>66</td>
<td>3.5</td>
</tr>
<tr>
<td>AF204-5 Assembly and Rigging, Airframe Fire Protection</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AF205-5 Fuel Systems</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>AF206-5 Paints and Finishes</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AF207-5 Cabin Atmosphere, Oxygen Systems, Ice and Rain</td>
<td>84</td>
<td>5.0</td>
</tr>
<tr>
<td>AF208-5 Airframe Electrical I</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AF209-5 Airframe Electrical II</td>
<td>66</td>
<td>3.5</td>
</tr>
<tr>
<td>AF210-5 Position and Warning</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>AF211-5 Aircraft Instruments, Advanced Troubleshooting</td>
<td>48</td>
<td>2.5</td>
</tr>
<tr>
<td>AF212-5 Navigation and Communication Systems</td>
<td>72</td>
<td>4.0</td>
</tr>
<tr>
<td>AF213-5 Hydraulics and Pneumatics</td>
<td>42</td>
<td>2.5</td>
</tr>
<tr>
<td>AF214-5 Landing Gear Systems</td>
<td>42</td>
<td>2.0</td>
</tr>
<tr>
<td>AF215-5 Airframe Inspection</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>COURSES</td>
<td>CLOCK HOURS</td>
<td>CREDIT HOURS</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>POWERPLANT SECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP201-5</td>
<td>54</td>
<td>3.0</td>
</tr>
<tr>
<td>PP202-5</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>PP203-5</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>PP204-5</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>PP205-5</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>PP206-5</td>
<td>54</td>
<td>3.0</td>
</tr>
<tr>
<td>PP207-5</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>PP208-5</td>
<td>84</td>
<td>4.5</td>
</tr>
<tr>
<td>PP209-5</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>PP210-5</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>PP211-5</td>
<td>84</td>
<td>5.0</td>
</tr>
<tr>
<td>PP212-5</td>
<td>66</td>
<td>4.0</td>
</tr>
<tr>
<td>PP213-5</td>
<td>54</td>
<td>3.0</td>
</tr>
<tr>
<td>PP214-5</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>PP215-5</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>PP216-5</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CAPSTONE SECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ201-5</td>
<td>90</td>
<td>4.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GENERAL EDUCATION SECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GE110-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE111-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE112-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE113-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE114-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE115-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Credit Hours</strong></td>
<td>134</td>
<td></td>
</tr>
<tr>
<td><strong>Total Clock Hours</strong></td>
<td>2,280</td>
<td></td>
</tr>
<tr>
<td><strong>Total Quarters</strong></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td><strong>Total Months</strong></td>
<td>24</td>
<td></td>
</tr>
</tbody>
</table>

*The Capstone course is not included in the FAA approved curriculum*
### Airframe and Powerplant Technician (Certificate)

The Airframe and Powerplant Technician program is a combination of classroom and hands-on instruction and outside work/homework. Upon completion of this FAA (Federal Aviation Administration) certificated program, graduates are eligible to apply and test for the Airframe and Powerplant FAA Certification that is nationally recognized. Upon certification, graduates also possess industry-recognized certificates and are prepared to enter various career areas of the aviation industry at an entry level. Career options include, but are not limited to, **Commercial Airlines, Corporate Aviation, Helicopters, Unmanned Aircraft Systems, General Aviation, Manufacturing, Repair and Overhaul and Avionics**. A sample of entry-level careers include: Airframe Technician, Powerplant Technician, Aircraft Restoration, Jet Engine Mechanic, Avionics Technician, Avionics Installer, Engine Manufacturing, Structures Technician, Line Service Technician, Ramp/Ground Service Agent, Ground Service Equipment Mechanic, Sheetmetal Technician, Structures Technician. There are some limitations for career options without the FAA Airframe and Powerplant Certification. Graduates can also secure entry-level positions in other technical areas such as: **Manufacturing Production** (Electrical, Hydraulics/Pneumatics Technician, Maintenance Technician, Sheetmetal/Composite Technician), **Engine and Other Machine Assemblers** (Engine Assembly/Builder, Fuel Injection Technician, Dynamometer Technician, Maintenance Technician, Mechanical Technician, Testing Technician, Turbine Mechanic, Turbine Technician) and **Electrical/Electronics** (Control Technician, Instrument Repair Technician, Electronics Technician, Field Service Technician, Service Technician).

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIR SCIENCE (GENERAL) SECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS101-5 Learning Strategies, Human Factors and History</td>
<td>42</td>
<td>2.0</td>
</tr>
<tr>
<td>AS102-5 Math</td>
<td>24</td>
<td>1.5</td>
</tr>
<tr>
<td>AS103-5 Physics</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS104-5 Weight and Balance</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>AS105-5 Drawings</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>AS106-5 FAR’s, Maintenance Publications and Limitations</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AS107-5 Tools, Safety and Ground Operations</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AS108-5 Fluid Lines and Fittings</td>
<td>24</td>
<td>1.0</td>
</tr>
<tr>
<td>AS109-5 Cleaning and Corrosion</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS110-5 Materials and Processes</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS111-5 Non-Destructive Testing</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AS112-5 Basic Electricity I</td>
<td>42</td>
<td>2.5</td>
</tr>
<tr>
<td>AS113-5 Basic Electricity II</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AS114-5 Basic Electricity III</td>
<td>42</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>AIRFRAME SECTION</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AF201-5 Basic Sheetmetal and Welding Familiarization</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>AF202-5 Principles of Troubleshooting</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>AF203-5 Non-Metallic Structures</td>
<td>66</td>
<td>3.5</td>
</tr>
<tr>
<td>AF204-5 Assembly and Rigging, Airframe Fire Protection</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AF205-5 Fuel Systems</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>AF206-5 Paints and Finishes</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AF207-5 Cabin Atmosphere, Oxygen Systems, Ice and Rain</td>
<td>84</td>
<td>5.0</td>
</tr>
<tr>
<td>AF208-5 Airframe Electrical I</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>AF209-5 Airframe Electrical II</td>
<td>66</td>
<td>3.5</td>
</tr>
<tr>
<td>AF210-5 Position and Warning</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>AF211-5 Aircraft Instruments, Advanced Troubleshooting</td>
<td>48</td>
<td>2.5</td>
</tr>
<tr>
<td>AF212-5 Navigation and Communication Systems</td>
<td>72</td>
<td>4.0</td>
</tr>
<tr>
<td>AF213-5 Hydraulics and Pneumatics</td>
<td>42</td>
<td>2.5</td>
</tr>
<tr>
<td>AF214-5 Landing Gear Systems</td>
<td>42</td>
<td>2.0</td>
</tr>
<tr>
<td>AF215-5 Airframe Inspection</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>COURSES</td>
<td>POWERPLANT SECTION</td>
<td>CLOCK HOURS</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>PP201-5 Reciprocating Engine Operation</td>
<td>54</td>
<td>3.0</td>
</tr>
<tr>
<td>PP202-5 Propellers</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>PP203-5 Powerplant Lubrication Systems</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>PP204-5 Reciprocating Engine Induction and Exhaust</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>PP205-5 Reciprocating Engine Fuel Metering Systems</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>PP206-5 Reciprocating Engine Ignition Systems</td>
<td>54</td>
<td>3.0</td>
</tr>
<tr>
<td>PP207-5 Reciprocating Engine Instruments</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>PP208-5 Reciprocating Engine Inspection and Overhaul</td>
<td>84</td>
<td>4.5</td>
</tr>
<tr>
<td>PP209-5 Reciprocating Engine Troubleshooting</td>
<td>18</td>
<td>1.0</td>
</tr>
<tr>
<td>PP210-5 Turbine Engine Designs</td>
<td>36</td>
<td>2.0</td>
</tr>
<tr>
<td>PP211-5 Turbine Engine Operation</td>
<td>84</td>
<td>5.0</td>
</tr>
<tr>
<td>PP212-5 Turbine Engine Accessories</td>
<td>66</td>
<td>4.0</td>
</tr>
<tr>
<td>PP213-5 Turbine Engine Instruments</td>
<td>54</td>
<td>3.0</td>
</tr>
<tr>
<td>PP214-5 Turbine Engine Maintenance and Overhaul</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>PP215-5 Turbine Engine Troubleshooting</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>PP216-5 Turbine Engine Fire Protection</td>
<td>30</td>
<td>1.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CAPSTONE SECTION</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ201-5 Capstone</td>
<td>90</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>

**Total Credit Hours**

<table>
<thead>
<tr>
<th><strong>Total</strong></th>
<th><strong>Credit Hours</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td></td>
</tr>
</tbody>
</table>

**Total Clock Hours**

<table>
<thead>
<tr>
<th><strong>Total</strong></th>
<th><strong>Clock Hours</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>2,040</td>
<td></td>
</tr>
</tbody>
</table>

**Total Quarters**

<table>
<thead>
<tr>
<th><strong>Total</strong></th>
<th><strong>Quarters</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>8.5</td>
<td></td>
</tr>
</tbody>
</table>

**Total Months**

<table>
<thead>
<tr>
<th><strong>Total</strong></th>
<th><strong>Months</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

*The Capstone course is not included in the FAA approved curriculum*
Energy Technology-AAS (Degree – Associate in Applied Science)

The Energy Technology programs are a combination of classroom, hands-on assignments and outside work/homework. Power generation, power plant operations, wind power, compression technology and process systems are covered. Graduates will have entry-level career choices in the energy industry to include, Wind, Gas, Coal, Nuclear, Solar, Standby Power, Geothermal, Hydroelectric, Methane/Landfill Gas Generation, Power Distribution and Dispatch, and Water Treatment. Jobs may include: Power Plant Operator, Maintenance Worker/Reparer, Industrial Mechanic, Electrical/Electrician Repairer, Auxiliary Operator, Control Operator, Operations and Maintenance Technician, Field Service Technician, Boiler Operator, Gas Turbine Technician, Wind Turbine Construction Technician, Wind Service Technician, Quality Control Technician, Millwright, Testing Technician, Telecommunication Technician, Blade Repair Technician, Maintenance Apprentice, Generator Technician and Solar Installation Technician. Additionally, the general education courses expand and enhance non-technical skills important to the career growth and development of graduates of this program.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET101-3</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>RT102</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT103</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>ET105-3</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT104</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>ET109-3</td>
<td>40</td>
<td>2.0</td>
</tr>
<tr>
<td>ET110-3</td>
<td>80</td>
<td>4.5</td>
</tr>
<tr>
<td>ET111-3</td>
<td>60</td>
<td>3.0</td>
</tr>
<tr>
<td>ET112-3</td>
<td>60</td>
<td>3.0</td>
</tr>
<tr>
<td>ET113-3</td>
<td>80</td>
<td>4.5</td>
</tr>
<tr>
<td>ET114-3</td>
<td>40</td>
<td>2.0</td>
</tr>
<tr>
<td>ET115-3</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT201</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT202</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT205</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT211</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT212</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>RT213</td>
<td>30</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION SECTION**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE110-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE111-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE112-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE113-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE114-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE115-3★</td>
<td>40</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Credit Hours: 106
Total Clock Hours: 1,680
Total Quarters: 7
Total Months: 16
Industrial Maintenance Technician (Certificate)


<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET101-3 Energy Industrial Fundamentals and Safety Compliance</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>RT102 Math, OSHA-10, and First Aid</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT103 Applied Physics and Precision Measuring</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>ET105-3 DC and AC Basic Electricity</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT104 Advanced Electrical Theory</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>ET113-3 Materials Processing, Welding and Diesel</td>
<td>80</td>
<td>4.5</td>
</tr>
<tr>
<td>ET114-3 Industrial Heating and Cooling, and Compression Systems</td>
<td>40</td>
<td>2.0</td>
</tr>
<tr>
<td>ET115-3 Steam and Gas Turbines, Boiler Operations, and Valves</td>
<td>120</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Total Credit Hours 42
Total Clock Hours 720
Total Quarters 3
Total Months 7
Wind Power Technician (Certificate)

The Wind Power Technician program is a combination of classroom, hands-on assignments and outside work/homework. Graduates will have entry-level career choices in the wind industry including Service, Manufacturing, Construction, Commissioning, and Sales. Jobs may include: Wind Service Technician, Wind Turbine Construction Technician, Blade Repair Technician, Control Room Operator, Generator/Winder, Control/SCADA Operator and Wind Turbine Sales Representative.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ET101-3 Energy Industrial Fundamentals and Safety Compliance</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>RT102 Math, OSHA-10, and First Aid</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT103 Applied Physics and Precision Measuring</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>ET105-2 DC and AC Basic Electricity</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT104 Advanced Electrical Theory</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>ET109-3 Renewable Energy Sources</td>
<td>40</td>
<td>2.0</td>
</tr>
<tr>
<td>ET110-3 Wind Technology and Components</td>
<td>80</td>
<td>4.5</td>
</tr>
<tr>
<td>ET111-3 Wind Turbine Operation</td>
<td>60</td>
<td>3.0</td>
</tr>
<tr>
<td>ET112-3 Climb and Rescue</td>
<td>60</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Credit Hours 41
Total Clock Hours 720
Total Quarters 3
Total Months 7
HVACR Technician (Certificate)

The HVACR (Heating, Ventilation, Air-conditioning and Refrigeration) Technician Program is a combination of classroom, hands-on assignments and outside/homework. The program consists of four phases: heating, ventilation, air-conditioning, and refrigeration. Students will develop troubleshooting skills, learn the proper and safe handling of potentially hazardous materials, understand how to balance ventilation systems and develop a variety of other skills necessary to perform the functions of a HVACR technician. Upon successful completion of this program, graduates will have entry-level career opportunities in a variety of areas in the HVACR industry to include, residential and commercial heating, air-conditioning, and refrigeration. A sample of job titles include: AC Technician, Environmental Technician, Building Maintenance Technician, Installation Technician, Apprentice, Industrial Air Handling Technician, Refrigeration Technician, and Furnace Repair Technician.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HV001-4 HVACR Core, Basic Electricity and Motors</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>HV004-4 Fundamentals of Refrigeration</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>HV005-4 Heating Systems I</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>HV006-4 Indoor Air Fundamentals</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>HV007-4 Heating Systems II</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>HV008-4 Air Conditioning and Alternative Systems</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>HV010-4 Sheetmetal, Installation, Codes and EPA</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>HV012-4 Building Management and NATE Core</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>HV014-4 Commercial Refrigeration I</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>HV015-4 Commercial Refrigeration II</td>
<td>60</td>
<td>3.5</td>
</tr>
</tbody>
</table>

| Total Credit Hours                     | 57.5        |
| Total Clock Hours                      | 960         |
| Total Quarters                        | 4           |
| Total Months                          | 9           |
32 PROGRAMS OF STUDY

Robotics and Automation Technology-AAS (Degree – Associate in Applied Science)

The Robotics and Automation Technology program is a combination of classroom and hands-on instruction and outside work/homework. Upon completion of this program, graduates are prepared to enter various industries at an entry level. Career paths include, but are not limited to, energy, aerospace, automotive, manufacturing, agriculture, industrial automation, biomedical, telecommunications, unmanned vehicles, and robotics. A sample of entry-level careers include: Electrical and Electronics Repairers, Commercial and Industrial; Electro-Mechanical Technicians; Electrical and Electronic Engineering Technicians; Precision Instrument and Equipment Repairers; Instrumentation Technician; and Electromechanical and Instrumentation and Controls, and Maintenance Technician. Additionally, the general education courses expand and enhance non-technical skills important to the career growth and development of graduates of this program.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT101 Manufacturing Systems and Technology</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>RT102 Math, OSHA-10 and First Aid</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT103 Applied Physics and Precision Measuring</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>ET105-3 DC and AC Basic Electricity</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT104 Advanced Electrical Theory</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT201 Digital Electronics and Circuits</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT202 Instrumentation, Controls, Basic Electro-Mechanical Devices</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT203 Industrial Networking</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT204 C Programming</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT205 Programmable Logic Controllers</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT206 Basic Industrial Robotics</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>RT207 Drafting and Computer Aided Design</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>RT208 Design and Imaging</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>RT209 Advanced Industrial Robotics</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>RT210 Hydraulics, Pneumatics and Mechanical Systems</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT211 Advanced Electro-Mechanical Devices</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT212 Advanced Troubleshooting and Control Systems</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>RT213 Critical Thinking and Technical Communication</td>
<td>30</td>
<td>1.5</td>
</tr>
</tbody>
</table>

**GENERAL EDUCATION SECTION**

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE110-3 ★ Intermediate Algebra</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE111-3 ★ English Composition</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE112-3 ★ Public Speaking</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE113-3 ★ Introduction to Sociology</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE115-3 ★ Organizational Behavior</td>
<td>40</td>
<td>4.0</td>
</tr>
<tr>
<td>GE118-3 ★ College Technical Math</td>
<td>40</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Credit Hours**: 107  
**Total Clock Hours**: 1,680  
**Total Quarters**: 8  
**Total Months**: 18
33 PROGRAMS OF STUDY

Robotics and Automation Technician (Certificate)

The Robotics and Automation Technician program is a combination of classroom and hands-on instruction and outside work/homework. Upon completion of this program, graduates are prepared to enter various industries at an entry level. Career paths include, but are not limited to, energy, aerospace, automotive, manufacturing, agriculture, industrial automation, biomedical, telecommunications, unmanned vehicles, and robotics. A sample of entry-level careers include: Electrical and Electronics Repairers, Commercial and Industrial; Electro-Mechanical Technicians; Electrical and Electronic Engineering Technicians; Precision Instrument and Equipment Repairers; Instrumentation Technician; and Electromechanical and Instrumentation and Controls, and Maintenance Technician.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT101 Manufacturing Systems and Technology</td>
<td>120</td>
<td>7.5</td>
</tr>
<tr>
<td>RT102 Math, OSHA-10 and First Aid</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT103 Applied Physics and Precision Measuring</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>ET105-3 DC and AC Basic Electricity</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT104 Advanced Electrical Theory</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT201 Digital Electronics and Circuits</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT202 Instrumentation, Controls and Basic ELM Devices</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT203 Industrial Networking</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT204 C Programming</td>
<td>60</td>
<td>3.5</td>
</tr>
<tr>
<td>RT205 Programmable Logic Controllers</td>
<td>120</td>
<td>7.0</td>
</tr>
<tr>
<td>RT206 Basic Industrial Robotics</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>RT207 Drafting and Computer Aided Design</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>RT208 Design and Imaging</td>
<td>30</td>
<td>1.5</td>
</tr>
<tr>
<td>RT209 Advanced Industrial Robotics</td>
<td>90</td>
<td>5.0</td>
</tr>
<tr>
<td>RT210 Hydraulics, Pneumatics and Mechanical Systems</td>
<td>120</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Total Credit Hours 69.5
Total Clock Hours 1,200
Total Quarters 5
Total Months 12
PROGRAMS OF STUDY

Welding Specialist (Certificate)

The Welding Specialist program is designed to prepare graduates for a variety of entry-level positions in the field of welding in a variety of technical industries such as oil and gas, power generation, manufacturing, general fabrication and research and development. Entry-level positions exist in other technical industries that utilize the technical knowledge and skills possessed by the graduate. The program encompasses both theoretical and hands-on training in all phases of welding including base metal selection and preparation, welding equipment selection and set-up and weld evaluation and inspection. A sample of job titles include: Aluminum Welder, Brazer, Cutter, Fabrication Welder, Fabricator, Fitter/Welder, Industrial Welder, Maintenance Welder, MIG/TIG Welder, Shielded Metal Arc Welder, Pipe Welder, Solderer, Sub Arc Operator, Welder, Welder-Fitter, Welder/Fabricator.

<table>
<thead>
<tr>
<th>COURSES</th>
<th>CLOCK HOURS</th>
<th>CREDIT HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>WS101-1 Shielded Metal Arc Welding I</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>WS102-1 Shielded Metal Arc Welding II, Drawings, Symbols and Metal Characteristics</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>WS103-1 GMAW/FCAW/GTAW, Equipment and Filler Metals</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>WS104-1 Shielded Metal Arc Open Root Welding, Various Metals</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>WS105-1 GMAW Welding</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>WS106-1 GTAW Aluminum Welding</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>WS107-1 GTAW Carbon Steel Welding</td>
<td>120</td>
<td>6.5</td>
</tr>
<tr>
<td>WS108-1 GTAW Stainless Steel Welding</td>
<td>120</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Total Credit Hours 52
Total Clock Hours 960
Total Quarters 4
Total Months 9
This page has been left blank intentionally
Course Descriptions

Aviation Maintenance Technology-AAS
Airframe and Powerplant Technician Certificate

Air Science Courses

AS101-4 Learning Strategies, Human Factors and History
This course will prepare the student to succeed in their post-secondary education program by providing the student with learning strategy skills such as basic computer and software application, time management, study techniques, note taking and other similar skills. The student will gain an understanding and awareness of human factors unique to aviation. This course also covers the history of aviation from early balloons and gliders through modern transport jet aircraft. The student is also introduced to the basic aircraft nomenclature.

AS102-4 Math
This is a study of basic math and formulas, which will be encountered and used by the technician in performing daily activities. Fundamentals such as fractions, percentages, addition, multiplication and division will be reviewed and expanded upon. Students will study how to extract roots and raise numbers to a given power; determine areas and volumes of various geometrical shapes; solve ratio, proportion, and percentage problems; and perform algebraic operations involving addition, subtraction, multiplication, and division of positive and negative numbers.

AS103-4 Physics
This subject relates the conditions of the physical world and their effect on systems and components used in aircraft. Students will learn to use and understand the principles of simple machines; sound, fluid, and heat dynamics; basic aerodynamics; aircraft structures; and theory of flight.

AS104-4 Drawings
This course includes a study of all elements necessary for effective understanding and interpretation of aircraft drawings. Drawing types include working drawings, schematics and assembly. Students will learn how to use and interpret aircraft drawings, symbols, and system schematics; draw sketches of repairs and alterations; use blueprint information; and use graphs and charts.

AS105-4 Weight and Balance
This class contains a study of the weight and balance of aircraft and its relationship to maintenance, installation and flight characteristics. The student will learn to weigh aircraft and how to perform complete a weight and balance check and record data.

AS106-4 FARs and Maintenance Publications and Limitations
This course will provide the student with a solid foundation and understanding regarding FAA acceptable publications. This will include FAR’s, maintenance manuals and the privileges/limitations of an A&P license. Students will demonstrate the ability to read, comprehend, and apply information contained in FAA and manufacturers’ aircraft maintenance specifications, data sheets, manuals, publications, and related FAA regulations, airworthiness directives, and advisory material.

AS107-4 Tools, Safety and Ground Operations
The student will receive instruction in the criteria for selecting the proper tool for a job, whether it is a hand tool or power. With the ability to select the proper tool, the student will then learn how to properly and safely use the tools that are essential to the Aviation Maintenance Technician. Students are taught hangar safety, starting of aircraft, directing aircraft for taxi, tying down of aircraft and jacking an aircraft.

AS108-4 Fluid Lines and Fittings
The student will acquire knowledge and skills based on standard industry practices relating to fabrication and repair of rigid and flexible fluid lines used in various aircraft systems.

AS109-4 Cleaning and Corrosion
Students will learn about the practices and processes used for cleaning aircraft parts and structures, and the methods used to protect them from corrosion. Students will be able to identify and select cleaning materials; and inspect, identify, remove, and treat aircraft corrosion and perform aircraft cleaning.

AS110-4 Materials and Processes
The student will learn to identify, properly select and use a variety of aircraft hardware and materials used for aircraft repair and maintenance. Students will learn how to inspect and check welds and to perform precision measurements.
AS111-4  Non-Destructive Testing (NDT)
In this course several different types of non-destructive testing methods are explored. Students will learn how to identify and select appropriate non-destructive testing methods. They will perform dye penetrant, eddy current, ultrasonic, and magnetic particle inspections. They will gain an understanding of how to perform basic heat-treating processes.

AS112-4  Basic Electricity I
The student will be introduced basic of electricity and DC electrical theory and principles, and their application to aircraft systems. This course is designed to introduce the student to aircraft electrical circuit diagrams, including solid state devices and logic functions. Basics such as ohm’s law and power calculations will be included.

AS113-4  Basic Electricity II
The student will be introduced to AC electrical theory and principles, and their application to aircraft systems. This course is designed to introduce the student to aircraft electrical circuit diagrams, including solid state devices and logic functions. Basics such as ohm’s law and power calculations will be included. Students will also learn about aircraft batteries.

AS114-4  Basic Electricity III
This will include DC and AC circuit operation and electrical fundamentals, which will prepare the student for advanced electrical functions and troubleshooting. The characteristics of both AC and DC electricity will be explored, and their unique operation and application will be demonstrated.

Airframe Courses

AF201-4  Basic Sheetmetal and Welding
Familiarization
Students receive a general introduction to FAA’s requirements for sheetmetal fabrication and repair. Industry standard practices such as de-burring metal to prevent cracking and failure will be included. Proper interpretation of repair drawing as well as the process to develop a repair plan will be discussed and applied publications. This class includes special fasteners, layouts, bends in sheetmetal, forming and stressed skin repairs. Fasteners such as Hi-Lock, Taper Lock, Cherry-Max and Cam-Locks will be selected and installed as per a print. Repair procedures and requirements will be evaluated and employed during this phase of training. In this class repair procedures and requirements will be evaluated and employed during this phase of training and welding will be discussed and demonstrated at an entry level. Fundamental operations such as oxyacetylene equipment operation and safety are included in this course.

AF202-4  Advanced Sheetmetal
In this course the student will develop advanced skills and techniques used in the workplace. This course includes advanced hardware such as Hi-Lock and Taper-Lock fasteners. Advanced fabrication skills such as shrinking and stretching will provide significant hands on experience that will prepare the student for a career focused on sheetmetal repair and fabrication.

AF203-4  Non-Metallic Structures
This course is designed to introduce the student to composite materials, such as fiberglass and Kevlar, used in aircraft construction and some of the historically traditional building materials and techniques, like wood and fabric.

AF204-4  Assembly/Rigging and Airframe Fire Protection
This course covers the theory of flight and explains correct aircraft nomenclature for both fixed and rotary wing aircraft. It includes verification of structural alignment, control responses and balancing. Aircraft component and cabling assembly, inspection and repair are accomplished. The student will be exposed to the fire detection, warning and protection systems as they relate to the airframe.

AF205-4  Fuel Systems
This class covers aircraft fuel systems and all associated components from the fueling point to the combustion chamber. Students will learn to check and service fuel dump systems; perform fuel management transfer and defueling; inspect, check, and repair pressure fueling systems; repair aircraft fuel system components; inspect and repair fluid quantity indicating systems; troubleshoot, service, and repair fluid pressure and temperature warning systems; and inspect, check, service, troubleshoot, and repair aircraft fuel systems.

AF206-4  Paints and Finishes
Students learn to identify aircraft dopes, paints, thinners and related materials. Application of materials, inspection of finishes and recognition of defects are accomplished. Students will learn to apply trim, letters, and touch-up paint; identify and select aircraft finishing materials; apply finishing materials; and inspect finishes and identify defects.

AF207-4  Cabin Atmosphere, Oxygen Systems and Ice and Rain
This course covers the inspection, checking, troubleshooting, service and repair of heating, cooling, air conditioning, pressurization systems, and air cycle machines. The student will learn to inspect, check, troubleshoot, service and repair oxygen systems. Students will also be exposed to ice and rain systems, maintenance and installation.
37 COURSE DESCRIPTIONS

AF208-4 Airframe Electrical I
This course will familiarize the student with basic airframe and powerplant electrical installation and troubleshooting. Component identification by location and function will be included. Troubleshooting and fault isolation will be demonstrated and practiced by the student.

AF209-4 Airframe Electrical II
Material covered will expand on and reinforce the troubleshooting skills learned in Airframe Electrical I. Complex drawings and systems will be evaluated and inspected in this phase of electrical training. Students will study various electrical systems from a functional point of view and identify faults.

AF210-4 Position and Warning and Principles of Troubleshooting
The student will learn to inspect, check, troubleshoot and service aircraft speed and configuration warning systems, landing gear position indicating and warning systems, airframe carbon monoxide systems. The student will also develop the demanding skills needed for aviation troubleshooting. Hands-on activities to identify problems commonly found in aviation maintenance and logically develop solutions to those problems will be practiced.

AF211-1 Aircraft Instruments and Advanced Troubleshooting
This course contains the theory of all instruments and instrument systems used for flight and navigation of an aircraft. The student will develop an understanding of avionics at the systems level and how data is transferred in those systems. The student will develop an understanding of computer systems in the aircraft and their function as it relates to the operation and maintenance of the aircraft. In addition, the student will be exposed to real world aviation databases, which they will encounter in the workplace and develop an understanding of one or more specific avionics system utilized in today’s aircraft.

AF212-4 Navigation and Communication Systems
This course is a study of aircraft navigation, communication, approach control systems and autopilot. The course includes inspection, installation, service and FAA regulations. Traditional analog gauges as well as digital advanced systems will be included in this course.

AF213-4 Hydraulics and Pneumatics
This course acquaints students with basic hydraulic and pneumatic principles, operation and servicing of equipment. It includes information covering fluids, washers, seals, pressures and component repair. Basic theory is reinforced through hands-on activities such as the inspection of a hydraulic pump for efficiency after a detailed disassembly and reassembly by the student.

AF214-4 Landing Gear Systems
Study in this area increases the student’s knowledge of hydraulic and pneumatic landing gear systems, including operation, tires, and anti-skid brakes. This course includes a discussion of inspection, troubleshooting and repair of systems. The hands-on activities include oleo strut identification and disassembly, brake system inspection to include pad wear and rotor measurement.

AF215-4 Airframe Inspection
The student will be required to perform airframe conformity and airworthiness inspections including 100 hour and annual type. The process will include the proper completion of all of the required records and forms. This process will be conducted in lock-step fashion using approved maintenance manuals and inspection techniques. Any defect will be recorded and a logbook entry will be completed. Also included is an Airworthy Directive search for compliance with the FAR’s.

Powerplant Courses

PP201-4 Reciprocating Engine Operations
The student will be required to perform airframe conformity and airworthiness inspections including 100 hour and annual type. The process will include the proper completion of all of the required records and forms. This process will be conducted in lock-step fashion using approved maintenance manuals and inspection techniques. Any defect will be recorded, and a logbook entry will be completed. Also included is an Airworthy Directive search for compliance with the FAR’s.

PP202-4 Propellers
The student will learn the theory of aircraft propellers, installation procedures, major and minor repair classifications, balancing, tracking, government regulations concerning maintenance and aircraft applications of propellers and governors. Students will learn to inspect, check, service, and repair propeller synchronizing; identify and select propeller lubricants; balance propellers; repair propeller control system components; inspect, check, service, and repair fixed-pitch, constant-speed, and feathering propellers, and propeller governing systems; install, troubleshoot, and remove propellers; and repair aluminum alloy propeller blades.

PP203-4 Powerplant Lubrication Systems
This course addresses the identification of lubricants and their functions. It includes identifying, servicing and adjusting the components, installing rings and lines, interpreting FAA regulations pertaining to oil tanks and disassembling and reassembling engine oil pumps.
COURSE DESCRIPTIONS

PP204-4 Reciprocating Engine Induction and Exhaust
This course covers the inspection, troubleshooting, service and repair of reciprocating engine induction and exhaust components, operation and inspection including turbo charger, superchargers, heat exchangers, airflow and temperature controls, and engine ice and rain control systems.

PP205-4 Reciprocating Engine Fuel Metering Systems
Float-type carburetors, pressure-type carburetors and direct fuel injection theory and operation are stressed. The course includes inspection, removal and adjustment of carburetors. The physics required for a carbureted engine to function will be explained. The pressures of a fuel injection system as well as the injectors and their operation will be included in this course.

PP206-4 Reciprocating Engine Ignition Systems
This course offers hands-on experience in disassembling, inspecting, timing and reassembling magnetos; removing, inspecting, checking, troubleshooting and reinstalling ignition wiring. Sparkplug operation, cleaning and testing will be demonstrated and performed by the students. High-tension wires and magneto operations will be examined.

PP207-4 Reciprocating Engine Instrument Systems
The student will learn to troubleshoot, service and repair electrical and mechanical fluid rate-of-flow indicating systems as well as electrical and mechanical engine temperature, pressure, and RPM indicating systems.

PP208-4 Reciprocating Engine Inspection and Overhaul
This course provides theory and hands-on experience on reciprocating engines, including inspection, servicing, repair and overhaul of opposed engines. Standard operating procedures such as shop safety and equipment protection will be emphasized. Engine removal, troubleshooting and engine installation are covered in this class. Disassembly, inspection and reassembly are in this course. Several key measurements such as piston wear will be taken and recorded using precision measuring devices such as micrometers. Reassembly will include the use of tools such as torque wrenches and cylinder wrenches as required. Instructors monitor the reassembly operations to insure a safe work environment.

PP209-4 Reciprocating Engine Troubleshooting
The student will practice the systematic identification of problems that develop in engine systems, such as intake, fuel delivery, ignition and exhaust. Faults that occurred during the rebuilding process or that were introduced into the engine by design will be identified and corrected to allow an engine run on a test stand.

PP210-4 Turbine Engine Design
This course is designed to develop an understanding of the designs of turbine engines used on aircraft to include turbojet engines, turbofan engines and turboprop engines. The multiple operating principals will be described as well as the specific benefit of each for a given application. The evolution of the different designs will be explained.

PP211-4 Turbine Engine Operation
This course will introduce the future technician to gas turbine engines beginning with the history of the development of gas turbines, the theory of jet propulsion followed by a study of the major sections of a typical gas turbine engine. After a familiarization of turbine engine development, the student will see and identify the intake, compression, hot section, the turbine and exhaust areas of a given turbine engine.

PP212-4 Turbine Engine Accessories
In this course the student will be exposed to accessory and auxiliary turbine engine systems, such as engine ignition, fuel, thrust augmentation, bleed air and others. All of the accessories that are used to support the turbine engine will be explained and diagramed for the students.

PP213-4 Turbine Engine Instruments
This course covers the instrumentation found in turbine engine installations, including instrumentation found in transport category aircraft. The interpretation of the data received from the instrumentation will be demonstrated and explained. Analog and digital instruments will be included in this training.

PP214-3 Turbine Engine Maintenance and Overhaul
In this course the student is introduced to the maintenance and inspections required for turbine engines. This course utilizes approved maintenance publications and Federal Aviation Administration databases such as the Airworthiness Directive catalog. Inspection techniques such as bore scope inspection is included in this course. The student is exposed to the overhaul procedures of turbine engines.

PP215-4 Turbine Engine Troubleshooting
In this course the student will practice the systematic identification of problems that develop in turbine engine systems, including intake, compressor, ignition, combustion, power, exhaust, bleed air and fuel.

PP216-4 Powerplant Fire Protection
In this course the student will be exposed to fire detection, warning and protection systems as they relate to the powerplant. The students will learn how to inspect, check, service, troubleshoot and repair engine fire detection and extinguishing systems.
Energy Technology-AAS
Industrial Maintenance Technician Certificate
Wind Power Technician Certificate

ET101-3 Energy Industry Fundamentals and Safety Compliance
This course reviews the history of the power technology industry up to and including the present and a review of common terminology and definitions used in the industry. An overview of the components and the function of a power plant will be presented. The student will engage in hands-on activities that support principles of physics, as they apply to hydraulics and pneumatics, and the basic knowledge of the many components used in these systems. This introductory class will alert the student to the many hazards encountered in the production and use of high and low voltage electrical equipment. Other topics explored in this class will be related to Lifting and Rigging, Fire Prevention, Lock Out Tag Out, as well as, Confined Space and Hazmat Safety.

ET105-2 DC and AC Basic Electricity
In this course, students will learn direct current (DC) electrical theory and applications. This course is designed to teach students electrical circuit schematics and diagrams including, charging and storage functions. This also includes circuit operations and electrical fundamentals, which will prepare the student for electrical functions, design, and troubleshooting. Generator and motor maintenance, repair, operations and troubleshooting will be taught to students, and then demonstrated by the students. Students will design, calculate, build and troubleshoot a variety of electrical circuits with the use or construction of an electrical schematic utilizing the proper testing equipment. Students will learn single phase, alternating current, electrical theory and principles, and their application to energy technology and power generation systems. Students will learn AC electrical circuit schematics and design, including AC electrical component operation, electrical fundamentals, circuit calculation, circuit design, circuit construction, and proper procedures for testing for advanced electrical functions and troubleshooting. Students will demonstrate complete lab projects, with the use of schematics, troubleshooting electrical faults, disassembly of components for repair, testing, and inspections.

ET109-3 Renewable Energy Technology
In this course, the student will learn about all renewable energy systems. The course will provide the student with knowledge of renewable energy sources and how they work in the energy industry. The student will demonstrate their acquired knowledge from the course by conducting research projects relating to renewable energy systems and presenting their findings. The student will gain hands-on experience with renewable energy systems utilizing the system manuals and electrical schematics to become familiar with the functions, operations, design, maintenance, troubleshooting, and repair of these systems.

ET110-3 Wind Technology and Components
In this course, the student will learn about wind turbine power generation and its function in the renewable energy technology industry. Fluid types, system inspection, and all aspects of component identification, function, maintenance, and repair will be addressed. System troubleshooting will be demonstrated and applied in this course. Additionally, the student will be taught proper maintenance, repair, and inspection requirements related to gear trains and lubrication systems. Inspection, mechanical purpose, maintenance procedures, and operational fundamentals of fluids, instrumentation, electrical and other components of a wind turbine will be taught through classroom and hands-on instruction.

ET111-3 Wind Turbine Operation
In this course, the student will learn operations and design of wind turbines in the energy technology and power generation industries. Students will demonstrate what they have learned by identifying the major components and their relationship to the wind turbine operation. With the use of the correct equipment manuals, and electrical schematics, the student will properly disassemble, test and/or inspect and reassemble wind turbine components and systems crucial to systems operation. They will also be taught proper torqueing procedures and complete torqueing procedures per equipment manual instruction. Identification of and adherence to proper technical and safety procedures will be emphasized to establish a culture of safety. Students will become familiar with equipment manuals and electrical schematics using them to complete the assigned maintenance, troubleshooting, inspections, and repairs. Pre-job task meetings, documentation, job hazard analysis, job safety analysis, confined space permits, lock-out tag-out forms, and hot work permits will be utilized so that students will become familiar with regard to industry procedures and protocols.

RT102 Math, OSHA-10 and First Aid
See Page 43

RT103 Applied Physics and Precision Measuring
See Page 43

RT104 Advanced Electrical Theory
See Page 43
ET112-3 Climb and Rescue
In this class, the student will learn the hazards involved in working at heights. The student will learn the ANSI safety standards and safety regulations relating to safe, accurate climbing, and rescue operations. The student will be taught and properly demonstrate correct equipment inspection techniques and proper use of the equipment. Demonstration and use of the approved equipment and correct rescue techniques will be completed in compliance with standards. The student will then be further evaluated by demonstrating what they have learned by correctly performing multiple equipment inspections, safe climbing practices, and participating in multiple climb and rescue exercises correctly while reflecting a culture of safety.

ET113-3 Materials Processing, Welding and Diesel
In this course, the student will complete standard inspections, and preventative maintenance practices will be demonstrated. The selection and use of proper tooling and standard maintenance practices will be emphasized. The student will demonstrate what they have learned by completing assigned hands-on projects in the lab that bring together precision measuring, drilling, threading, fastening, torqueing and similar other material processing techniques. In this course welding will be introduced. MIG, TIG, Stick and Oxy / Acetylene torching will continue the hands-on, lab heavy approach to learning. Diesel engine labs will help the student better understand the fundamentals and how diesel components relate to each other and how these prime movers can support the power industry as standby power. Students will properly complete pre-job task meetings and documentation, job hazard analysis, job safety analysis, confined space permits, lock-out tag-out forms, and hot work permits.

ET114-3 Industrial Heating and Cooling and Compression Systems
This course covers basic principles and fundamentals of the refrigeration processes, operations, with a primary focus on industrial and commercial refrigeration equipment. The student will understand the relationship and efficiency increase related to trigeneration or combined cooling, heat and power (CCHP) systems. This application of energy technology refers to the simultaneous generation of electricity, useful heating and cooling from the combustion of a fuel or a heat collecting solar system. This course will include the basic refrigeration cycle, how to handle refrigerant, equipment to work with refrigerants, working principals/application of commercial and industrial refrigeration equipment, and the rules and regulation set by the EPA for refrigerants. The student will study basic preventative maintenance, basic scheduled maintenance and basic troubleshooting. The student will gain an understanding of the various components and operations related to compressors and pumping equipment found in energy industries. Specific equipment such as screw, reciprocating, scroll, and centrifugal compressors, along with, positive displacement pumps and centrifugal pumps will be taught. The basic theory behind compression and pumping will be discussed in detail. Standard inspection, troubleshooting, operation, repair and preventative maintenance practices of these types of components will be demonstrated and practiced. The selection and use of proper tooling, manuals, documentation, safety equipment, techniques, and standard maintenance practices will be emphasized in this course.

ET115-3 Steam and Gas Turbines, Boiler Operations and Valves
In this course, the student will learn about scheduled and nonscheduled maintenance required for gas turbines. The student will also learn about the overhaul process discussed and demonstrate their skill by performing assigned hands-on tasks. The student will learn about the water treatment process used in power generation systems. The student will learn the need for water treatment and the process used to comply with state and federal guidelines to protect the environment. In this class the student will learn the basic operation and design, as well as, start-up and shutdown of boiler systems. The safety required for high pressure and high heat systems will be explained and reinforced through case studies. Fundamental operation and physics will be explained and demonstrated. Emergency procedures will be incorporated in this training.

RT201 Digital Electronics and Circuits
See Page 43

RT202 Instrumentation Controls, Basic Electro-Mechanical Devices
See Page 43

RT205 Programmable Logic Controllers and Applied Robotics
See Page 44

RT211 Advanced Electro-Mechanical Devices
See Page 44

RT212 Advanced Troubleshooting and Control Systems
See Page 44

RT213 Critical Thinking and Technical Communication
See Page 44
HV001-4  HVACR Core, Basic Electricity and Motors
This course introduces the student to the career paths and opportunities in the HVACR industry. Professional associations and professional certification are discussed as well. Basic Electricity and Motors are fundamental to the success of an HVACR technician. This course is designed to provide the students with the knowledge and technical skills to be applied to advanced courses further in the program as well as job duties in the field. In this course the student is introduced to electrical safety, electrical theory and principles. Basic concepts such as types of electrical circuits, circuit components, circuit protection, and the national electric code are discussed in the beginning of this course. As students advance, they will learn about AC and DC voltage supply and application in HVACR, circuit diagrams and the application of schematics in equipment troubleshooting and repair. Types of electric motors, motor controls and troubleshooting will be covered in this course.

HV004-4  Fundamentals of Refrigeration
Students will learn about the basic components of a refrigeration system and refrigeration systems accessories function, installation and service, as well as the basic refrigeration cycle. Additional topics covered will be heat transfer, heat transfer methods and heat content. Introduction to refrigerants will be included in this course, which will give the student a comprehensive understanding on the different types of refrigerants and the impact of refrigerants on the environment. This course will expose students to the safe and proper procedures of refrigerant handling including refrigerant recovery, recycle and reclaim.

HV005-4  Heating Systems I
This course will cover hydronic heating systems such as hot water boilers and steam boilers systems. The course will cover the different areas such as sizing and equipment selection as well as identifying the various components used in hydronic heating systems. Students will learn about installation and service of hydronic systems.

HV006-4  Indoor Air Fundamentals
The student will examine air movement, measurement including the understanding the concepts of climate and weather, humidity and an understanding of how air movement affects human comfort. The student will study air quality control as measured by temperature, humidity, fresh airflow, pollutants and chemicals in an enclosed space. Air distribution and ventilation system service are discussed during this course.

HV007-4  Heating Systems II
This course will cover heat load calculations, equipment sizing, equipment selection, and equipment installation and service for both residential and commercial setups. Students will be introduced to gas, oil and electric heating systems as well as control systems that operate in combination with heating systems such as thermostats and humidity and energy recovery systems. Students will practice furnace troubleshooting and tune-up using instruments including combustion analyzers, monometers and multi-meters. After completing this course, students will be able to install, troubleshoot and service heating systems.

HV008-4  Air Conditioning and Alternative Systems
In this course, students will learn about residential air conditioning systems as well as commercial air conditioning systems. The course will expose students to the methods of equipment sizing and selection. Students will practice the proper methods and procedures of installation and troubleshooting for air conditioning systems such as a residential central systems and commercial roof top units. Preventive maintenance will be included in this course. Students will learn about alternative, non-traditional HVAC systems, such as ductless multi-zone systems and geothermal systems. Students will learn about the components of such systems as well as installation and service.

HV010-4  Sheetmetal, Installation, Codes, and EPA
The student will learn about system installation and startup. This includes but not limited to, gas pipe, drain line, electrical and sheetmetal. The student will learn to use a variety of electrical, pressure and temperature measuring devices and will use sheetmetal tools necessary for fabrication and assembly of ductwork. Students will learn about the mechanical codes that regulate the installation of HVACR systems. Students will be exposed to the proper State mechanical codes as well as the International mechanical codes. The student will be introduced to EPA regulations, recovery requirements, leak detection, and repair. The intent of the course is to get students prepared to take and successfully pass the EPA 608 exam as well as R 410A refrigerant safety.
42 COURSE DESCRIPTIONS

HV012-4 Building Management and NATE Core
Students will learn about the importance of energy conservation as well as the purpose of building controls, protocols and principles of control system troubleshooting and repairs. Students will learn about the role of information technology in HVACR and building management systems installation and services, as well as components that can be added to an existing system to improve energy conservation. NATE, North American Technician Excellence: is a nationally recognized certification by HVACR contractors. In this course, the students review all associated course materials and be prepared to take the NATE Core examination. Topics such as communication skills, mathematics, basic science, personal ethics and conduct, fabrication tools, safety, heat transfer and comfort, electricity and motors will be covered in this extensive course.

HV014-4 Commercial Refrigeration I
In this course, the student is introduced to commercial refrigeration systems. This class explains system configurations, high-side components, low-side components, and piping. Special refrigeration systems and applications will be discussed to include transportation refrigeration as well as alternative methods.

HV015-4 Commercial Refrigeration II
In this course, the student will build upon the concepts and applications introduced in Commercial Refrigeration I.
Robotics and Automation Technology – AAS
Robotics and Automation Technician Certificate

RT101 Manufacturing Systems and Technology
In this course, the students will get an introduction to multiple areas of manufacturing theory, processes and technologies. The students will cover areas such as basic computer functions, lean manufacturing principles, types of automation, 3D printer calibration, prototyping with CAD, parameters, and basic troubleshooting. The students will be evaluated on their knowledge through testing and lab projects.

RT102 Math, OSHA, and First Aid
Students will cover mathematics, which are applied to the relevant subject areas throughout the program including applications of formulas, conversions, Imperial systems, metric systems, and additional subject areas relevant to progress in the program. Additionally, the students will learn the safety requirements while performing tasks on the job; including an understanding of Occupational Safety and Health Administration (OSHA) regulations and certification. Lock-Out Tag-Out procedures will be learned and demonstrated. This class will approach safety from a behavioral prevention standpoint. General lab safety and material handling will be covered as well as regulation compliance.

RT103 Applied Physics and Precision Measuring
In this course, the students will learn the proper use and interpretation of precision measuring devices such as dial indicators, micrometers, calipers, depth gauges, thread pitch gauges, etc., and the importance of precision measuring devices. This course will include both standard and metric tools, calculations, and techniques to teach the students about equipment that will be encountered in the field. Additionally, students will learn physics concepts and calculations, with relevance to the disciplines of this programs course content.

ET105-3 DC and AC Basic Electricity
See Page 39

RT104 Advanced Electrical Theory
Students will be introduced to more advanced electrical theory and applications. The students will work on projects that enhance their ability to design, navigate, troubleshoot, and analyze circuits with the utilization of electrical schematics. The students will complete hands-on lab projects that deal with programmable logic controllers, three-phase systems, and other industrial systems or application. Additionally, this course will cover safety hazards encompassed in troubleshooting and working with electricity. Students will complete the OSHA NFPA 70E arc flash training and testing and receive an OSHA NFPA 70E certificate for completion of the course.

RT201 Digital Electronics and Circuits
Students will learn basics of digital electronics by exploring semi-conductors, diodes, transistors and logic gates. Students will further their learning by working on applications of basic digital electronics devices. Students will also explore different numbering systems as they relate to digital electronics. In this course students will learn by constructing operational designs. Students will be evaluated using lab projects, demonstrations and testing.

RT202 Instrumentation, Controls and Basic Electro-Mechanical Devices
In this course, students will be introduced to instrumentation and control theory, design, components, and applications. This gives the students an initial look into functional control loops, sensors and transducer calibration as well as adjustable control parameters such as the proportional, integral, and derivatives. Students will learn the processes involved with monitoring and controlling of equipment. This course will inform students of utilization, and testing of instrumentation and control components. Students will be evaluated on their knowledge of control and instrumentation devices commonly used in the industry.

RT203 Industrial Networking
In this course, students will be taught the basics of industrial networking including study of design, and application related to industrial automation. Students will have exposure to physical components such as cabling, bridges, hubs, routers, switches, and additional devices. This will include building knowledge on LAN, WAN, wireless communication, encryption, industrial network protocols, network operating systems, types of network and other, critical, commonly utilize subject areas. Students will also begin to learn management concepts of networking and communication. Students will demonstrate this ability with labs that explore, identify and troubleshoot an industrial network.

RT204 C Programming
In this course, students will cover C programming, and applications. Students will learn the fundamentals of C/C++ programing and apply this knowledge to practical applications. The students will gain an understanding of these applications for this type of programming and how commonly it is used for microcontrollers and systems operations. Students will demonstrate their understanding by designing, programming, building and troubleshooting a variety of projects.
RT205 Programmable Logic Controllers
In this course, students will begin to demonstrate the obtained knowledge from prior course content using it to begin the programming of programmable logic controllers for the purpose of an operational function. The use of programming will be explored in reference to manufacturing, automation, and process applications along with additional practical applications. Students will be required to demonstrate their knowledge and skills by completing lab projects which will be further developed for future applications in this program.

RT206 Basic Industrial Robotics
This course will introduce students to the industrial robots, basic programming methods, safety and maintenance involved with these robots. Students will learn the benefits and needs of integration into robotic systems along with basic of tools need to do the integration. Students will also demonstrate skills learned through lab projects and testing.

RT207 Drafting and Computer Aided Design
In this course, students will learn and demonstrate their drafting abilities. This course will cover 2D and 3D tooling in a variety of CAD software applications for drafting and design. Students will work with a variety of technical tooling to replicate components, create models for application, and design blueprint layouts based on drafting standards. The students will be evaluated on their ability to demonstrate practical skills in drafting and Computer Aided Design via testing and lab projects.

RT208 Design and Imaging
In this course, students will continue learning about design, but with relevance to 3D applications. Students will also learn about the parameters and ideal settings to capture and edit 3D images using a 3D imaging system. This data will be modified, edited and rendered for utilization in 3D applications. Students will demonstrate their abilities by meeting specified criteria for design and editing.

RT209 Advanced Industrial Robotics
This class will work on advancing their knowledge with industrial robotics in regard to industrial applications and standard industrial protocols. This course will teach students about system integration, programming of autonomous systems and other robotic tasks. They will work on projects such as robot guidance, inspection, data collection through vision systems, interface and communication among other projects. Students will demonstrate management and maintenance of equipment and will be evaluated based on their knowledge through testing and lab projects.

RT210 Hydraulics, Pneumatics and Mechanical Systems
In this course, students will learn about hydraulics, pneumatics, belt drives, gear drives, and a variety of other mechanical systems. Students will use manuals and other resources to understand the equipment, and to meet the tolerances designed for specific systems. Students will demonstrate their knowledge of system inspections through hands on projects as well as documenting, calibrating, and testing systems.

RT211 Advanced Electro-Mechanical Devices
This course will build upon many of the skills learned throughout the program. In this course, students will continue to learn about electrical and mechanical relationships and connection used in the electrical mechanical engineering domain with emphasis on industrial and manufacturing applications. This will reinforce earlier concepts learned in the program. Students will also demonstrate skills learned by connecting electrical mechanical systems and testing operation.

RT212 Adv Troubleshooting and Control Systems
In this course, students will learn to troubleshoot electrical or mechanical systems. This will include physical, mechanical, electrical or electronic corrections for all types of electrical mechanical systems, controllers, programs, and industrial networks. Students will demonstrate and be evaluated on their ability to troubleshoot, advance and improve systems.

RT213 Critical Thinking/Communication
In this course, students will develop advanced critical thinking, analytic problem solving, and effective communication. This will include reporting and documenting an accurate evaluation process, faults, corrections, and prevention methods relevant to electrical mechanical engineering domain. Students will learn a common technical language and systematic problem-solving approach to identify root causes and communicate solutions.
Welding Specialist Certificate

All courses in the Welding Specialist certificate program will explain and incorporate safety obligations of workers, supervisors, and managers to ensure a safe workplace and compliance with OSHA-10 training requirements. Students will practice safe work procedures, proper use of personal protective equipment, and safe work practices for hazardous material handling.

WS101-1 Shielded Metal Arc Welding I
Students will learn how to clean and prepare all types of base metals for cutting or welding. The course identifies and explains joint design and base metal preparation for all welding tasks and identifies the codes that govern welding. Students will learn to identify and explain weld imperfections and causes and will have an understanding of non-destructive examination practices, visual inspection criteria, welder qualification tests, and the importance of quality workmanship. The student will learn the use of fit-up gauges and measuring devices to check fit-up and alignment and the use of plate and pipe fit-up and alignment tools to properly prepare joints. They will learn how to check for joint misalignment and poor fit and will know how to select and prepare metal for the welding process to ensure a quality weld. The student will learn about SMAW welding and welding safety, including how to connect welding current, setup arc welding equipment and the use of tools for cleaning welds. They will learn about electrode characteristics and different types of filler metals. The course covers proper storage and control of filler metals, and identifies the use of codes and explains groove welds and v-groove welds and how to set up filler metals, and explains welding detail drawings. Students will learn to describe lines, fills, object views, and dimensioning on drawings and how to use notes on drawings and the bill of materials. The course will explain the different parts of a welding symbol and describe different types of fillet weld, groove weld, and nondestructive examination symbols.

WS102-1 Shielded Metal Arc Welding II, Drawings, Symbols, and Metal Characteristics
This course describes the preparation and setup of arc welding equipment and the process of striking an arc. The student will learn how to detect and correct arc blow and how to make stringer, weave, overlapping beads, and fillet welds. The student will learn to complete quality welds using SMAW equipment. This course covers how a welder identifies and explains welding detail drawings. Students will learn to describe lines, fills, object views, and dimensioning on drawings and how to use notes on drawings and the bill of materials. The course will explain the different parts of a welding symbol and describe different types of fillet weld, groove weld, and nondestructive examination symbols.

WS103-1 GMAW/FCAW/GTAW, Equipment and Filler Metals
This course describes general safety procedures for GMAW and FCAW; identifies GMAW and FCAW equipment and explains the filler metals and shielding gases used to perform GMAW and FCAW. The course explains how to set up and use GMAW and FCAW equipment and build a pad of stringer beads and weave beads using filler metals and shielding gas. Students will learn the procedures to perform GMAW multi-pass fillet welds on plate in various positions and how to use GMAW and FCAW welding equipment to complete a quality weld. The course explains the use of GTA equipment, filler metals, and shielding gases; covers the setup of GTA equipment; describes how to pad in all positions using GTA and carbon steel filler metal; and covers making multi-pass V-butt open-groove welds with carbon steel filler metal in the 1G, 2G, 3G, and 4G positions. The student will learn how to use GTA equipment to perform a quality weld on material. Metallurgy will be discussed in detail to build an understanding of the various metal properties and characteristics.

WS104-1 Shielded Metal Arc Open Root Welding, Various Metals
This course explains how to set up SMAW equipment for open-root V-groove welds; explains how to prepare for and make open-root V-groove welds on various fittings, flanges, structures, and carbon steel pipe; and provides procedures for making open-root V-groove welds, with SMAW equipment, on pipe in the 1G-ROTATED, 2G, 5G, and 6G positions. The student will learn how to complete a quality weld on materials using shielded metal arc welding equipment. Metallurgy will be discussed as applied to types of materials being utilized.
WS105-1  GMAW Welding
The student will learn how to set up GMAW equipment. The course covers the procedures and techniques used to make open-root V-groove welds with GMAW on various fittings, flanges, structures, and pipe in the 1G-ROTATED, 2G, 5G, and 6G positions. The student will learn how to complete a quality weld on pipe using GMAW equipment. Metallurgy will be discussed as applied to types of materials being utilized.

WS106-1  GTAW Aluminum Welding
This course explains how to set up GTAW equipment for aluminum welding processes and covers the procedures and techniques used to welds with GTAW in multiple positions with multiple forms of aluminum stock. The student will learn how to weld on aluminum using GTAW equipment. Metallurgy will be discussed as applied to types of materials being utilized.

WS107-1  GTAW Carbon Steel Welding
The course explains how to set up GTAW and covers the procedures and techniques used to make V-groove pipe welds with GTAW in the 1G-ROTATED, 2G, 5G, and 6G positions for carbon steel. The student will learn how to complete quality welds with GTAW welding equipment. Metallurgy will be discussed as applied to types of materials being utilized.

WS108-1  GTAW Stainless Steel Welding
The course explains how to set up GTAW equipment and covers the procedures and techniques used to make V-groove pipe welds with GTAW in the 2G, 5G, and 6G positions on stainless steel. The student will learn how to weld on stainless steel using GTAW equipment. Metallurgy will be discussed as applied to types of materials being utilized.
GE110-3* Intermediate Algebra
This course introduces algebraic, geometric and trigonometric concepts. Topics include: a review of the fundamentals of fractions, decimals and percentages; terminology and applications of geometry; measurements and conversions; algebraic expressions, equations, and formulas; ratio and proportions; summary graphs and charts; and an introduction to right triangle trigonometry.

GE111-3* English Composition
This course teaches students to write effective academic essays for various audiences. Students develop written communication skills with emphasis placed on the principals of effective communication, which includes, understanding the writing process, critical reading and logical thinking skills. In addition to reviewing the writing process, students learn research techniques, citation techniques, documentation formats and critical analysis of written topics.

GE112-3* Public Speaking
This course gives you a reliable model for preparing and delivering effective presentations. In business, in school, and in public life, we communicate both verbally and nonverbally. This course is designed to help you enhance your communication skills. Students learn how organize talks clearly, write them memorably, and deliver them confidently. By the end of the course, students are able to significantly reduce their fear of public speaking, use rehearsal techniques to develop a strong, vibrant speaking voice, and perform speeches with dynamic movement and gestures. The speech model that we’ll practice is useful for briefings, elevator talks, interviews, and even as a structure for hour-long presentations. If you’re a beginner, this course will help you quickly master the fundamentals of speaking. If you’re a seasoned speaker, this course will help you better understand public speaking and push you to the next level.

GE113-3* Introduction to Sociology
This course is an introduction to the discipline of sociology. Because humans are social by nature, all of us are members of various social groupings and are located in a social system; we can only achieve an adequate understanding of ourselves after we have acquired the tools to understand that social system. This course explores sociological processes that underlie everyday life. The course focuses on socialization, cultural diversity, sociological theories, race, gender, families, education, religion, and social interaction.

GE114-3* Environmental Science
This course explores the relationship between man and the environment. Students examine balance between natural resources and the needs of mankind. Students explore the scientific, political, economic and social implications of environmental science.

GE115-3* Organizational Behavior
This course examines organizational theory and application. A comprehensive review is made of individual, group and organizational performance in relation to organizational structures in contemporary settings. The course content is specifically tailored to examine how organizational theory and application are applied within industries that are technical in nature and where the majority of the workforce are skilled trades.

GE118-3* College Technical Math
This course is designed to cover topics in Algebra ranging from polynomial, rational, exponential and logarithmic functions to conic sections. Trigonometry concepts such as Law of Sines and Cosines will be introduced. Students will begin analytic geometry and calculus concepts such as limits, derivatives, and integrals.

*Offered Via Distance Education
This page has been left blank intentionally
Management

Jennifer Paugh, Campus President
B.S., Secondary Education, H. Anderson College. B.S. Business Management, Western Governors University. Eighteen years of experience in secondary education, fifteen of those years serving in high-level to executive-level management positions in Education, Admissions and Student Services with seven years as a Campus President.

Michael Barragan, Senior Accountant
MBA-Accounting, Baker College Center for Graduate Studies, BBA-Accounting, Baker College. Fifteen years’ experience in the accounting field covering all areas including bookkeeping, payroll, accounts receivable/payable, and budgeting.

Kimberly Burton, Assistant Director of Financial Aid
B.S., Business Management, Kaplan University. Over ten years of experience at post-secondary institutions in all areas of finance aid.

Christopher Davis, Asst Dir of Community Partnerships
M.Ed., Educational Leadership, Saginaw Valley State University. B.A., Secondary Education, Alma College. Thirteen years of experience in the education field. Ten years as a high school teacher and coach and three years in post-secondary admissions with a career technical school.

Peter Kostiuk, Vice President of Finance/Strategic Ops
M.B.A., University of Chicago. B.A. Economics, Vanderbilt University; CFA Charter holder. Over seven years of financial, strategic, and operational analysis experience related to the security, defense, consumer, and education industries.

Mary Ladd, National Campus Operations Coordinator
B.B.A. Management and Marketing, Davenport University; A.A.S. General Studies, Schoolcraft College. Ten years’ experience in administration for the training department at MIAT and support of overall campus operations. Over twenty-five years’ experience as an executive assistant. ACCSC Certified Accreditation Professional (CAP).

Susan Martinez, Regulatory and Testing Administrator
Certificate, Accounting; Business Administration, Stautzenberger College. Over forty years’ experience in career education including the areas of bookkeeping, financial aid, student records and reporting to regulatory agencies. Twenty years’ experience in computer operations and information systems. Approved FAA exam proctor and testing site supervisor.

Andrew McKelvey, IT and Database Manager

Adrienne Ontiveroz, Director of Admissions
B.A. English Language and Literature and Cultural Anthropology from the University of Michigan-Ann Arbor. Extensive experience in direct fundraising for non-profit organizations. Four years in student recruitment at both the national and local level.

Jessica Pieknik, Registrar
A.A.S. Marketing and Applied Management, Schoolcraft College. Nearly 10 years’ experience in student records and eight years of business/administrative experience.

Cristy Ratliff, Vice President of Student Finance
M.A., Organizational Leadership and B.B.A., Argosy University. Ten years’ experience in financial aid for post-secondary institutions in a variety of capacities, including Director of Student Financial Services.

Shannon Wilson, Director of Human Resources
B.S., Human Resources Management, Baker College, Professional in Human Resources (PHR), HR Certification Institute (HRCI). Ten years of experience working in Human Resources, five of those years working as a Senior Generalist/Manager with a primary focus on recruiting, benefits administration, policy and procedures, onboarding, and training and development.

Christal Yono, Director of Career Services
B.S., Human Resources Development (minor in Labor Union and Employment Studies), Oakland University. Ten years of experience in employment staffing/recruiting eight of which as an Associate Director of Career Services for a career school.
TRAINING DEPARTMENT MANAGEMENT

Chris A. Pipesh, Vice President of Education

Shuhdi Alrishood, Assistant Director of Education
M.S. Administration, Central Michigan University, B.S.C. Agricultural Machinery, University of Basra, Iraq. Certificate in Climate Control Technology, Northwestern Technological Institute. Over four years’ experience in HVAC field with a concentration in the commercial environment. Licensed EPA 609 (Automotive AC), EPA 608 (Universal, Refrigerant), R410-A, NATE.

Derek Cichewicz, Assistant Director of Education

William Hughes, Hangar Manager

Thomas Little, Career Technical Education Manager

Neal Perkins Jr., Training/Student Affairs Coordinator

Christine Douglass, Program Director-General Ed
M.A. Business, Davenport University; M.A. Communication, Eastern Michigan University; B.S. Communications, Eastern Michigan University. Over ten years’ experience teaching at post-secondary institutions with a strong background in human resources.

Jeffery Hope, Program Director-Aviation
A.A.S. Aviation Maintenance Technology, Eastern New Mexico University-Roswell. FAA Airframe and Powerplant Technician Certificate. Six years’ experience overhaul and maintenance on turbojet engines. Light aircraft maintenance and inspections on Lear Jets, Falcons, and Citation II for general aviation and transport.

Joseph Hutchison – Learning Resource Manager

Melinda Opfcrmann , Learning Resource Coordinator

Margaret Schwanitz, Program Director - ELM

Darrin Spooner, Program Director-HVACR
EPA-approved Universal Refrigeration/Chlorofluorocarbon Certificate, Ferris State University. Over twenty-five years’ experience in inspecting, servicing, repairing, installing and maintaining residential and commercial HVAC systems. State of Michigan Licensed Mechanical Contractor (License #7111096) Classifications: 10D, 2, 3, 6, 7.
Kenneth Todd, Program Director-Energy
A.A.S. in Energy Technology from MIAT College of Technology. Nearly twenty years’ experience in management and technical employment; holding positions including machinist, motion/control technician, nuclear weapons technician, loss prevention manager, human resource manager, learning and development facilitator, market level recruiter, market operations manager and multi-unit manager.

Frank Zielinski, Hangar and Project Coordinator
Faculty

Andrew Anderson
Certificate HVAC-R Technician, MIAT College of Technology. Experienced manager of the Controls Division at Sharon’s Heating and Air Conditioning. Nearly thirty years of technical experience in various areas including: electronics, fabrication, machine operation, automotive, product development, farm management, and machine repair and maintenance. EPA 609 Universal, 401a, NATE Core, OSHA 10, LG VRF Installation, Aaron Prism II VAV controls, TRAC Pipe SPII.

Holly Arnold
A.A.S. Aviation Maintenance Technology, MIAT College of Technology. FAA Airframe and Powerplant Technician Certificate. Two years’ experience as a Maintenance Technician with Delta Airlines, four years’ experience as an aviation lab assistant instructor at MIAT College of Technology, and 2 years restoration at Yankee Air Museum.

Barton, Scott
A.A.S., Aviation Maintenance Technology, MIAT College of Technology. FAA Airframe and Powerplant Technician Certificate. Over five years’ experience in aviation maintenance and composite repairs working on MD-80, 727, 737, 747, 767, 777; Convair 340/5800; and Dassault Falcon aircraft.

Brian Beerbower

David Bindas – Senior Instructor

Kyle Blizzard
B.S., Manufacturing Engineering Technology, Ferris State University. A.A.S., Welding Technology, Ferris State University. U.S. Army veteran. Nearly five years’ experience as welder and engineering technician. Member of AWS and SME.

Timothy Castle

Richard Ernest

Faforke, Helmut

Anita Harold – Senior Instructor

Dwayne Jones

Peter Knox
A.A.S Aviation Maintenance Technology, MIAT College of Technology. FAA Airframe and Powerplant Technician Certificate. Four years’ aviation industry experience as an A&P mechanic and four years’ experience as an MIAT lab assistant.

Muhammad Laghari – Senior Instructor
BEng (Hons) Electrical and Electronics Engineering, The University of Nottingham. Seven years’ engineering experience in electronic device operations and research and development.
Alexander Matt  
O.A.S. Automotive and Autotronics Technology, Arizona Automotive Institute. OSHA 30, OSHA 10, ENSA, ASE. Nearly ten years’ experience as a technician in the wind power/renewable energy industry.

Edwin (“Mike”) Mill  
Over thirty years’ experience as an HVAC technician working throughout Michigan for companies including JE Johnson, D&G Heating, Al Walters Heating, Lakeshore Plumbing and Heating, and Weinkauf Plumbing/Heating.

Mark Nolff  

Michael O’Donnell  

Wesley Pringle  

Christopher Pudduck – Senior Instructor  

Richard Rau – Senior Instructor  

Mathew Ruffner  

Donald Skonieczny  
M.S. Computer Information Systems, University of Phoenix. B.S. Electronics Engineering Technology, DeVry University. Experience in both the private sector and military in security management of network systems including disaster recovery, encryption, data security, and security protocols. Over twenty years’ experience in post-secondary education.

David Souva – Senior Instructor  
Votech HVAC training. Millwrights Union training in welding and conveyor maintenance. Over fifteen years’ experience in HVAC industry performing maintenance, repair and installations. EPA certified.

Jason Todd  
A.A.S in Energy Technology from MIAT College of Technology. Five years’ experience as a field technician for Siemens Power Generation and six years’ experience as a machine operator.

Craig Vassel  
## Administrative Staff

### Admissions
- **Ruthie Aarons** Admissions Representative
- **Kent Hern** Admissions Representative
- **Brian McDonald** Admissions Representative
- **Skylar McGhee** Admissions Representative
- **Larry Gaul** High School Admissions Representative
- **Becky Bloechle** High School Admissions Representative
- **Jamar Cunningham** High School Admissions Representative

### Bookkeeping
- **Charlene Berry** Student Account Specialist
- **Kim Mitchell** Bookkeeper
- **Eve Pitts** Bookkeeper

### Career Services
- **Kristen Pica** Employment Advisor
- **Vera Ignatov** Employment Advisor

### Facilities and Equipment
- **Andy Cichewicz** Facilities Manager
- **Richard Goodwin** Special Projects Coordinator
- **Pete Herroon** Equipment Restoration

### Financial Aid
- **Maria Fe Tanzer** Financial Aid Officer
- **Shanine Williams** Financial Aid Officer
- **Ursula Williams** Financial Aid Officer

### Front Desk/Reception
- **Debbie Kilyanek** Administrative Assistant
- **Rachel Krumwiede** Administrative Assistant

### Learning Resource Center
- **Mike Giarmo** Assistant LRC Coordinator

### Marketing/Information Technology
- **DeAndre Calloway** Marketing and IT Specialist

### Student Records
- **Beth Street** Student Records - Registration Specialist

### Veteran Resources
- **Jeremi Redmond** Veteran Resources Representative
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acceptance or Denial</td>
<td>6</td>
</tr>
<tr>
<td>Accreditation and Approvals</td>
<td>2</td>
</tr>
<tr>
<td>Academic Calendars</td>
<td>54</td>
</tr>
<tr>
<td>Academic/Financial Aid Probation</td>
<td>16</td>
</tr>
<tr>
<td>Academic/Financial Aid Warning</td>
<td>16</td>
</tr>
<tr>
<td>Academic Policies</td>
<td>15</td>
</tr>
<tr>
<td>Addenda and Supplements to the Catalog</td>
<td>4</td>
</tr>
<tr>
<td>Administrative Staff</td>
<td>53</td>
</tr>
<tr>
<td>Admission of Disabled Students</td>
<td>7</td>
</tr>
<tr>
<td>Admission Requirements: Certificate Programs</td>
<td>5</td>
</tr>
<tr>
<td>Admission Requirements: Associate Degree Programs</td>
<td>5</td>
</tr>
<tr>
<td>Advising and Community Resources</td>
<td>10</td>
</tr>
<tr>
<td>Age Requirements</td>
<td>6</td>
</tr>
<tr>
<td>Airframe and Powerplant Technician Certificate Program</td>
<td>26</td>
</tr>
<tr>
<td>Alumni Retraining</td>
<td>9</td>
</tr>
<tr>
<td>Application Process</td>
<td>5</td>
</tr>
<tr>
<td>Attendance Taking Procedures</td>
<td>21</td>
</tr>
<tr>
<td>Auditing a Course</td>
<td>17</td>
</tr>
<tr>
<td>Aviation Maintenance Technology-AAS</td>
<td>24</td>
</tr>
<tr>
<td>Background Self Disclosure/Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>Campus Administration</td>
<td>ii</td>
</tr>
<tr>
<td>Campus Locations</td>
<td>2</td>
</tr>
<tr>
<td>Career and Student Services</td>
<td>9</td>
</tr>
<tr>
<td>Class Attendance and Absence Policy</td>
<td>20</td>
</tr>
<tr>
<td>Class Availability</td>
<td>17</td>
</tr>
<tr>
<td>Class Size</td>
<td>17</td>
</tr>
<tr>
<td>Clock Hour - Defined</td>
<td>18</td>
</tr>
<tr>
<td>Change of Content</td>
<td>ii</td>
</tr>
<tr>
<td>Code of Conduct (HOEA)</td>
<td>12</td>
</tr>
<tr>
<td>Commencement Ceremony</td>
<td>10</td>
</tr>
<tr>
<td>Comparable Credit</td>
<td>7</td>
</tr>
<tr>
<td>Comprehensive Student Complaint and Dispute Resolution System</td>
<td>22</td>
</tr>
<tr>
<td>Conditional Acceptance</td>
<td>6</td>
</tr>
<tr>
<td>Consumer Information</td>
<td>ii</td>
</tr>
<tr>
<td>Cost of Education</td>
<td>14</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>35</td>
</tr>
<tr>
<td>Course Repetitions</td>
<td>17</td>
</tr>
<tr>
<td>Credits Accepted by MIAT</td>
<td>8</td>
</tr>
<tr>
<td>Demonstration of English Proficiency</td>
<td>6</td>
</tr>
<tr>
<td>Distance Education</td>
<td>17</td>
</tr>
<tr>
<td>Early Departure from Class</td>
<td>21</td>
</tr>
<tr>
<td>Early FAA Oral and Practical Examinations</td>
<td>18</td>
</tr>
<tr>
<td>Energy Technology-AAS</td>
<td>28</td>
</tr>
<tr>
<td>Excused Absences</td>
<td>21</td>
</tr>
<tr>
<td>FAA Certification</td>
<td>18</td>
</tr>
<tr>
<td>Facilities and Equipment</td>
<td>3</td>
</tr>
<tr>
<td>Faculty</td>
<td>51</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Federal Direct Plus Loan</td>
<td>11</td>
</tr>
<tr>
<td>Federal Pell Grant</td>
<td>11</td>
</tr>
<tr>
<td>Federal Subsidized Direct Loan</td>
<td>11</td>
</tr>
<tr>
<td>Federal Unsubsidized Direct Loan</td>
<td>11</td>
</tr>
<tr>
<td>Final Grade Appeals</td>
<td>15</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>11</td>
</tr>
<tr>
<td>Grade Point Average Calculations</td>
<td>15</td>
</tr>
<tr>
<td>Grading System</td>
<td>15</td>
</tr>
<tr>
<td>Graduate Employment Assistance</td>
<td>9</td>
</tr>
<tr>
<td>Graduation Requirements</td>
<td>20</td>
</tr>
<tr>
<td>History</td>
<td>1</td>
</tr>
<tr>
<td>HVACR Technician Program</td>
<td>31</td>
</tr>
<tr>
<td>Incomplete Course</td>
<td>17</td>
</tr>
<tr>
<td>Index</td>
<td>58</td>
</tr>
<tr>
<td>Industrial Maintenance Technician Certificate Program</td>
<td>29</td>
</tr>
<tr>
<td>Learning Resource System</td>
<td>10</td>
</tr>
<tr>
<td>Leave of Absence</td>
<td>21</td>
</tr>
<tr>
<td>Make Up Time – FAA Certificated Programs</td>
<td>20</td>
</tr>
<tr>
<td>Management</td>
<td>48</td>
</tr>
<tr>
<td>Memberships and Other Affiliations</td>
<td>2</td>
</tr>
<tr>
<td>New Student Orientation</td>
<td>8</td>
</tr>
<tr>
<td>Notice of Non-Discrimination</td>
<td>4</td>
</tr>
<tr>
<td>Online Catalog</td>
<td>ii</td>
</tr>
<tr>
<td>Online Course Requirements</td>
<td>6</td>
</tr>
<tr>
<td>Other Financial Aid Programs</td>
<td>11</td>
</tr>
<tr>
<td>Ownership</td>
<td>2</td>
</tr>
<tr>
<td>Pace of Completion</td>
<td>16</td>
</tr>
<tr>
<td>Personal Property</td>
<td>4</td>
</tr>
<tr>
<td>Philosophy and Objectives</td>
<td>1</td>
</tr>
<tr>
<td>Post Withdrawal Disbursement</td>
<td>14</td>
</tr>
<tr>
<td>Program Advisory Committees</td>
<td>3</td>
</tr>
<tr>
<td>Programs of Study</td>
<td>24</td>
</tr>
<tr>
<td>Privacy of Student Records (FERPA)</td>
<td>19</td>
</tr>
<tr>
<td>Privacy of Educational Records of Graduates</td>
<td>20</td>
</tr>
<tr>
<td>Professional Conduct and Appearance</td>
<td>22</td>
</tr>
<tr>
<td>Questions, Concerns or Complaints</td>
<td>4</td>
</tr>
<tr>
<td>Re-establishing Eligibility</td>
<td>17</td>
</tr>
<tr>
<td>Refund Policies</td>
<td>12</td>
</tr>
<tr>
<td>Return of Federal Title IV Funds</td>
<td>13</td>
</tr>
<tr>
<td>Return of Non-Title IV Funds</td>
<td>13</td>
</tr>
<tr>
<td>Robotics and Automation Technician Certificate Program</td>
<td>33</td>
</tr>
<tr>
<td>Robotics and Automation Technology-AAS</td>
<td>32</td>
</tr>
<tr>
<td>Satisfactory Academic Progress Appeal</td>
<td>16</td>
</tr>
<tr>
<td>Satisfactory Academic Progress Policies</td>
<td>15</td>
</tr>
<tr>
<td>Scholarship Programs</td>
<td>11</td>
</tr>
<tr>
<td>School Closings</td>
<td>18</td>
</tr>
<tr>
<td>School Hours</td>
<td>18</td>
</tr>
<tr>
<td>Student Complaint/Grievance Procedure</td>
<td>23</td>
</tr>
<tr>
<td>Topic</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Student Employment Assistance</td>
<td>9</td>
</tr>
<tr>
<td>Student Handbook</td>
<td>9</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>iii</td>
</tr>
<tr>
<td>Tardiness Policy</td>
<td>21</td>
</tr>
<tr>
<td>Third Party Exam Fees</td>
<td>12</td>
</tr>
<tr>
<td>Transferability of Credit to Other Institutions</td>
<td>8</td>
</tr>
<tr>
<td>Transfer and Comparable Credit Policy</td>
<td>7</td>
</tr>
<tr>
<td>Transfer Credit</td>
<td>7</td>
</tr>
<tr>
<td>Tuition, Books, Tools, and Supplies</td>
<td>12</td>
</tr>
<tr>
<td>Tutoring</td>
<td>10</td>
</tr>
<tr>
<td>Vaccine Policy</td>
<td>6</td>
</tr>
<tr>
<td>Veteran Services</td>
<td>9</td>
</tr>
<tr>
<td>Veteran Benefits</td>
<td>11</td>
</tr>
<tr>
<td>Weapons, Explosives, Similar Devices</td>
<td>4</td>
</tr>
<tr>
<td>Welcome Letter from Campus President</td>
<td>i</td>
</tr>
<tr>
<td>Welding Specialist</td>
<td>34</td>
</tr>
<tr>
<td>Wind Power Technician Certificate Program</td>
<td>30</td>
</tr>
<tr>
<td>Withdrawals</td>
<td>13</td>
</tr>
</tbody>
</table>