



Student Catalog

November 18, 2019

Volume 17



Founded 1969

Branch Campus
533 NorthPark Central Drive
Houston, TX 77073
(832) 234-5700 • (888) 547.7047
www.miat.edu

Student Catalog

Volume 17

Accredited by the Accrediting Commission of Career Schools and Colleges (ACCSC)

Approved and Regulated by
Texas Higher Education Coordinating Board (THECB)
Austin, TX
(Texas Campus)

Approved and Regulated by
Texas Workforce Commission (TWC) –
Austin, TX
(Texas Campus)

Certificated by the Federal Aviation Administration (FAA)

Approved for the Federal Military and Veterans Education Benefits (VA)

Date of Publication: 11.18.2019

Volume 17

WELCOME

Message from the Campus President

Dear Students,

Congratulations on the start of your new journey filled with exciting opportunities leading to a successful and rewarding career. As the Campus President, 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,

A handwritten signature in black ink, appearing to read "John Willis". The signature is stylized and fluid, with a long horizontal stroke extending to the right.

John Willis
Campus President



Houston Campus Administration

John Willis – Campus President
Titus Hubbard – Director of Education
Lorilei Gonzales – Learning Resource Coordinator
Chad Rogers – Director of Admissions

Benjamin Yager – Assistant Director of Financial Aid
Gail Branch – Director Career and Student Services
Richard Whiteside – Special Projects Director

ACCSC School of Distinction

The Houston Campus was awarded *School of Distinction* by the Accreditation Commission of Career Schools and Colleges (ACCSC) for 2016-2017.

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 supplement 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, MIAT encourages you to review this catalog prior to signing an enrollment agreement. You are also encouraged to review the school's graduation and employment rates, updated annually, and the Gainful Employment Disclosures for each program located at: <https://www.miat.edu/disclosures/>.

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 (MIAT) is a private school founded in 1969 in Michigan 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 school opened the Houston, Texas branch campus in 2010, which began by

offering the Energy Technician program 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 including substation, and standby power. The campus was approved in 2014 to offer an academic associate degree in Energy Technology.

The HVACR program, created in 2012, was developed to meet the needs of the heating and cooling industry for qualified technicians in both the residential and commercial market.

MIAT's Houston campus was approved by the FAA as an Aviation Maintenance School in 2014. In February, 2015 MIAT received approvals from ACCSC to offer Aviation Technology programs focusing on the 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.

In 2018, the Houston campus added welding programs specifically designed to prepare graduates for entry-level positions in structural, pipe and pipeline, thin alloy welding, pipefitting, and steam fitting.

Additional diploma programs were added in 2019 to meet market demand for trained technicians in the area of Non-Destructive Testing. Utilized in a wide-range of industries, non-destructive testing is the process of inspecting, testing, or evaluating materials, components or assemblies for discontinuities, or differences in characteristics without destroying the serviceability of the part or system.

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

Ownership

MIAT College of Technology is owned and operated by Michigan Institute of Aeronautics, Inc., a subsidiary of HCP ED Holdings, Inc. which is affiliated with Hispania Private Equity II, L.P.

2 GENERAL INFORMATION

Accreditation and Approvals

MIAT College of Technology 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 eligibility for funding 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 Campus President.

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.

Texas Higher Education Coordinating Board (THECB)

The Houston campus of MIAT College of Technology is approved and regulated by the Texas Higher Education Coordinating Board, Austin, Texas.

Texas Workforce Commission (TWC)

The Houston campus of MIAT College of Technology is approved and regulated by the Texas Workforce Commission - Career Schools and Colleges, Austin, Texas.

Department of Veterans Affairs (VA)

All programs are approved for federal military and veteran educational benefits. Information regarding benefits may be obtained from the veterans' certifying official designated by MIAT College of Technology.

Federal Aviation Administration (FAA)

MIAT College of Technology operates FAA approved Aviation Maintenance Technician programs. Certificate # 9MUT613K.

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

Memberships and Other Affiliations

Aircraft Electrical Association (AEA)
American Wind Energy Association (AWEA)
Association for Women in Aviation Maintenance (AWAM)
Aviation Technician Education Council (ATEC)
Center for Energy Workforce Development (CEWD)
CyFair Houston Chamber of Commerce
Esco Group – HVAC Excellence
Greater Houston Partnership (GHP)

Helicopter Association International (HAI)
Houston East End Chamber of Commerce
Houston Northwest Chamber of Commerce
Human Resources Construction Council (HRCC)
Independent Energy Human Resource Association (IEHRA)
Manufacturing Skill Standards Council (MSSC)
Midwest Energy Association (MEA)
Refrigeration Service Engineers Society (RSES)
Regional Air Cargo Carriers Association (RCCA)
Regional Airline Association (RAA)
Society for Human Resource Management (SHRM)
Warehousing Education and Research Council (WERC)
Women in Aviation International (WAI)

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 are able to 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

MIAT is located off of the I-45 North Interstate in central North Houston. The campus occupies approximately 56,400 square feet of space. In addition to ample administrative offices, the campus has nine classrooms, a learning resource center, computer labs and fully air-conditioned shop/laboratory facilities, with parking sufficient to accommodate the student enrollment.

Students training is augmented with practical application in the lab using basic equipment found in various segments of the energy industry, including gas and steam engines. In addition, the school maintains an assortment of electronic equipment for building circuits and troubleshooting as well as generator and electrical distribution mock-ups for training. The Energy technology courses employ acetylene and inert gas welding equipment, industry standard lifting and rigging mock-ups, precision measuring devices, and engines to

3 GENERAL INFORMATION

provide practical training. MIAT has a specific focus on renewable energy in the wind turbine training area. With a General Electric 1.5 MW turbine, students are exposed to wind equipment found in the field. Common maintenance such as lubrication and cooling are explained and demonstrated. Real world equipment allows the student to understand and develop confidence for their first entry level job in the wind turbine maintenance field.

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

The Aviation programs are supported by a variety equipment and training aids approved by the FAA including reciprocating and turbine-jet powerplants, generator and electrical distribution mock-ups, airframe and powerplant training mock-ups, ground equipment and a complete Cessna P210. The training also incorporates the use of a run-up stand for the O-200A reciprocating engine which supplements the Allison 250 turbine engine, a runnable PT6 and a Garmin 1000 avionics simulator.

The Welding programs utilizes a variety of widely-used welding equipment. The lab area has 15 welding stations, 10 grinding stations and three (3) gouging stations. Students have use of multi-function welders, bevel torches, pipe bevel torches, floor grinders, band saws, cutting torches, and plasma cutters.

The hands-on training equipment used in the Non-Destructive Testing programs include items such as eddy current machines, ultrasound machines, magnetic particle yoke kits, penetrant, magnifying glasses and borescopes.

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
533 NorthPark Central Drive ♦ Suite 150
Houston, TX 77073

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 will complete an Application for Consideration, execute an Enrollment Agreement (see Conditional Enrollment), submit any additional required documentation (including references and a student budget worksheet), and pay the \$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.

With the assistance and guidance of MIAT College of Technology support personnel, the applicant will provide documentation to fulfill the following Admission Requirements.

Admission Requirements: Diploma Programs

For applicants requesting admission to one of the MIAT College of Technology Diploma 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 recognized equivalency certificate such as the General Education Development (GED) or copy of the GED transcript showing fulfillment of the requirements for a 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 provide one of the following:

1. A copy of a high school transcript indicating a CGPA or 2.5 or better with 12th grade level English and Mathematics courses.
2. An official college transcript from an accredited institution showing successful completion of an Associate, Bachelor or Master's degree.

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.

Entrance Evaluation in Lieu of Documentation

For applicants requesting admission to an Associate in Applied Science degree program that are unable to provide the above noted documentation or that only possess a GED, the applicant will be required to complete an entrance evaluation, the Wonderlic Scholastic Level Exam (SLE), with a minimum acceptable score of **12** or provide proof of successful completion of college courses (at least 12 credit hours) from another school.

MIAT also recognizes the Scholastic Aptitude Test (SAT) and the American College Testing (ACT) scores provided the results are within three years of the date of application as an acceptable entrance exam. The SAT minimum score is **375** in Math and **350** in Reading. The ACT minimum score is **17** in Math and **16** in Reading.

5 ADMISSION REQUIREMENTS

Conditional Enrollment

An Enrollment Agreement is not valid until a college official countersigns after verifying documentation that all admission requirements are met, which includes receipt of Proof of Graduation (POG) or a valid equivalent. Before all documentation is received and verified, a student is conditionally enrolled.

Acceptance or Denial

The Admissions Requirements listed above will determine acceptance or denial into MIAT College of Technology 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
533 NorthPark Central Drive
Houston, TX 77073

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.

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 the Application for Consideration. A criminal conviction is not necessarily a bar to admittance. The Student Services representative will assess the circumstances surrounding the offense, timeframe, nature, gravity and the relevancy of the

conviction to potential employment limitations after graduation. Based on the evaluation a committee may be formed for further consideration. MIAT College of Technology reserves the right to conduct a secure background evaluation to obtain 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 alias's
- 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 be only 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.

6 ADMISSION REQUIREMENTS

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 College of Technology 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 an 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 notice 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.

7 ADMISSION REQUIREMENTS

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 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 College of Technology's course credits towards their programs. However, MIAT College of Technology 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 College of Technology does not make any representation that credits from MIAT College of Technology 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 College of Technology accepts no responsibility if credits earned at MIAT will not transfer to another educational institution. It is the student's responsibility to confirm whether another educational institution of the student's choice will accept credits.



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.

MIAT has many employer contacts. The Career Services department and MIAT graduates have established an outstanding reputation among these employers. This reputation has been achieved because our students and graduates followed 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. Please see a list of these expectations in the Student Handbook under *Career Services Expectations, Standards, and Policies*. If any student or graduate fails to follow these and other expectations, standards and policies, MIAT reserves the right to limit any and all career services, including but not limited to, exclusion from MIAT facilitated employment interviews.

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.



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.

A variety of companies frequently conduct on-campus interviews and employment presentations for our 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 the employer's request and requirements.

Students and graduates should be aware that employers rely heavily upon an individual's attitude, appearance and attendance record, 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

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 the life of 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. Please contact the Director of Education for more information.

Student Employment Assistance

Career Services continually develops and maintains relationships with local employers interested in hiring students for a variety of miscellaneous full-time or part-time positions. Job openings are updated frequently and are posted on campus bulletin boards and e-mailed to students who have expressed an interest in employment while attending school. This is a cooperative environment where students work closely with the Career Services department. Ultimately, it is the responsibility of the student to find and maintain employment, if desired, while attending school.

9 CAREER AND STUDENT SERVICES

Student Handbook

The MIAT Student Handbook is available online at the school's website. 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

Students may occasionally need additional assistance throughout their training at MIAT. We have dedicated facilities and staff available for individual tutoring and assistance at no additional cost. Students needing assistance should contact their Instructor, LRC Coordinator or 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 Recourse Center – "LRC" (technical library), the Tool Crib, computer labs/work stations providing access to maintenance manuals and simulation software and the school's online learning platform, Canvas, which contains instructional materials, study guides and any other course specific resources and assignments. The LRC also serves as a tutoring area for students who need extra help. The LRC 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 graduation requirements. Graduates are encouraged to participate. 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 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 and Student 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.

Housing Referral Program

MIAT College of Technology is a non-residential educational facility and does not provide student housing. However, MIAT has partnered with Collegiate Housing Services (CHS) which collaborates with local apartment communities to assist students who are relocating to the area with shared living accommodations. The apartment communities are located close to the school and provide convenient and affordable housing. Additional information on CHS is available on MIAT's website (www.miat.edu/student-services/housing-referral-program) or in the campus's Admissions department.

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 financial 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

Types of Financial Aid

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

FEDERAL SUBSIDIZED DIRECT LOAN

Federal Subsidized Direct Loan is a federal student loan for which a borrower is not generally responsible for paying the interest on the loan while in an in-school, grace or deferment period.

FEDERAL UNSUBSIDIZED DIRECT LOAN

Federal Unsubsidized Direct Loan is a federal student loan for which the borrower is fully responsible for paying the interest on the loan regardless of the loan status.

FEDERAL DIRECT PLUS LOAN

Federal PLUS Direct Loans are loans to eligible parents of dependent undergraduate students to help pay for the cost of the student's education at participating schools.

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: Bureau of Indian Affairs, Vocational Rehabilitation and Michigan Works. MIAT College of Technology may be able to provide additional information about these financial aid programs. Students should thoroughly investigate the availability of other sources of financial aid or assistance and should not rely upon MIAT as being their sole source of all information regarding the availability of such programs, if any.

Scholarship Programs

MIAT offers several 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 a database of scholarship opportunities. For specific information, please see Financial Aid.

Code of Conduct (HEOA)

The Higher Education Opportunity Act (HEOA) added to MIAT College of Technology Program Participation Agreement with the Department of Education a requirement that institutions participating in a Title IV loan program must 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,

11 FINANCIAL AID

employees and agents of MIAT College of Technology. The Code of Conduct is published in its entirety on the school's website: 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 the 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 varies 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 and 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/) 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 Policy – All Program Except Aviation

1. The applicant will receive a full refund if the applicant cancels the enrollment agreement within 72 hours (until midnight of the third day excluding Saturdays, Sundays and legal holidays) after the enrollment agreement is signed.
2. A full refund will also be made to any student who cancels enrollment within the student's first three

scheduled class days, except that the school may retain not more than \$100 in any administrative fees charged, as well as items of extra expense that are necessary for the portion of the program attended and stated separately on the enrollment agreement.

3. If an applicant is denied admission to the school for any reason, all monies paid by the applicant will be refunded within 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 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 30 days.
5. Refunds will be based on scheduled course time of class attendance through the last date of attendance. Leaves of absence, suspensions and school holidays will not be counted as part of the scheduled class attendance.
6. The effective date of termination for refund purposes will be the earliest of the following: (a) The last day of attendance, if the student is terminated by the school; (b) The date of receipt of written notice from the student; or (c) Ten school days following the last date of attendance.
7. If tuition and fees are collected in advance of entrance, and if after expiration of the 72-hour cancellation privilege the student does not enter school, not more than \$100 in administrative fees charged shall be retained by the school.
8. If a student enters a residence program and withdraws or is otherwise terminated after the cancellation period, MIAT may retain not more than \$100 in any administrative fees charged for the entire program. The minimum refund of the remaining tuition and fees will be the pro rata portion of tuition, fees and other charges that the number of hours remaining in the portion of the course or program for which the student has been charged after the effective date of termination bears to the total number of hours in the portion of the

12 FINANCIAL AID

course or program for which the student has been charged, except that a student may not collect a refund if the student has completed 75% or more of the total number of hours in the portion of the program for which the student has been charged on the effective date of termination.¹

9. Refunds for items of extra expense to the student, such as books, tools, or other supplies should be handled separately from refund of tuition and other academic fees. The student will not be required to purchase instructional supplies, books and tools until these materials are required. Once these materials are purchased, no refund will be made. For full refunds, MIAT can withhold costs for these types of items from the refund as long as they were necessary for the portion of the program attended and separately stated in the enrollment agreement. Any such items not required for the portion of the program attended must be included in the refund.
10. A student who withdraws for a reason unrelated to the student's academic status after the 75% completion mark and requests a grade at the time of withdrawal shall be given a grade of "incomplete" and permitted to re-enroll in the course or program during the 12-month period following the date the student withdrew without payment of additional tuition for that portion of the course or program.
11. 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.
12. A full refund of all tuition and fees is due and refundable in each of the following cases: (a) An enrollee is not accepted by the school; (b) If the course of instruction is discontinued by the school and this prevents the student from completing the course; or (c) If the student's enrollment was procured as a result of any misrepresentation in advertising, promotional materials of the school, or representations by the owner or representatives of the school. *A full or partial refund may also be due in other circumstances of program deficiencies or violations of requirements for career schools and colleges.*
13. **Refund Policy for Students Called to Active Military Service:** A student who withdraws from MIAT as a result of the student being called to active duty in a military service of the United States or the Texas National Guard may elect one of the following options for each program in which the student is enrolled: (a) If tuition and fees, or other charges paid by the student for the program and a cancellation of

any unpaid tuition, fees, or other charges owed by the student for the portion of the program the student does to complete following withdrawal; (b) A grade of incomplete with the designation "withdrawn-military" for the courses in the program, other than courses for which the student has previously received a grade on the student's transcript, and the right to re-enroll in the program, or a substantially equivalent program if that program is no longer available, not later than the first anniversary of the date the student is discharged from active military duty without payment of additional tuition, fees, or other charges for the program other than any previously unpaid balance of the original tuition, fees, and charges for books for the program; or (c) The assignment of an appropriate final grade or credit for the courses in the program, but only if the instructor(s) of the program determine that the student has: (i) satisfactorily completed at least 90 percent of the required coursework for the program; and (ii) demonstrated sufficient mastery of the program material to receive credit for completing the program.

14. The payment of refunds will be totally completed such that the refund instrument has been negotiated or credited into the proper account(s), within 60 days after the effective date of termination.

¹ *More simply, the refund is based on the precise number of course time hours the student has paid for, but not yet used, at the point of termination, up to the 75% completion mark, after which no refund is due. Form CSC-1040R provides the precise calculation.*

Refund Policies – Aviation Programs Only

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.

13 FINANCIAL AID

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 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. MIAT strongly recommends against students disrupting their training schedule for any reason. However, upon presentation of a 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 withdraws before the completion of the course must retake the full 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 a quarter 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

14 FINANCIAL AID

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.

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.

	At Home	Away from Home
Room/Board	\$485	\$1,430
Transportation	\$271	\$271
Personal*	\$422	\$422
Indirect Costs	\$1,178	\$2,123

** 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.

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

- 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** Indicates the course was repeated and no credit was awarded.
- W** Withdrawn
- CR** Transfer Credit or Comparable Credit
- L** Leave of Absence
- WM** Withdrawn Military

Under *Texas Education code, Section 132.061(f)*, a student who is obligated for the full tuition may request a grade of “incomplete” if the student withdraws for an appropriate reason unrelated to the student’s academic status. In this case, the student will be allowed to re-enroll in the program or course during the 12-month period following the date the student withdraws and complete those subject(s) without payment of additional tuition. (*Title 40, Texas Administrative Code, Section 807.241-245*)

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 College of Technology. 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 College of Technology 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:

16 ACADEMIC POLICIES

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. Since grades of IC are not included in the calculation of GPA, the GPA nor CGPA is not final until grades of IC are resolved. 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 hours earned by the cumulative hours 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 ($36 \times 66.67\% = 24$). Please see the chart below for details.

Attempted Credits	Minimum CGPA	Minimum Completion
1-30	1.7	50.00%
31+	2.0	66.67%

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 ($110 \text{ credits} \times 150\% = 165 \text{ credits}$). 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 credit 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.

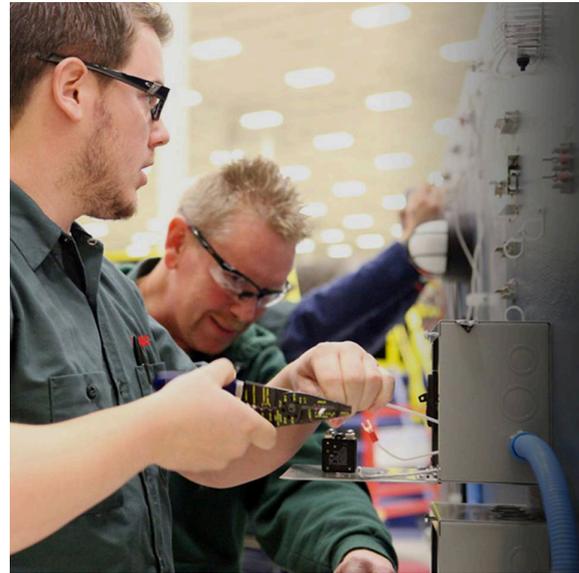
Pace of Completion

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” are counted as attempted for minimum pace of completion.

Regarding 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, it will not include in the calculation of a student’s satisfactory academic progress standing, the credits attempted and grades earned that do not count toward the student’s new program.



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.

17 ACADEMIC POLICIES

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 the 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 demonstrate satisfactory academic progress by the next evaluation point.
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 Campus President. Students with successful appeals are placed on Academic/financial aid probation.

Academic/Financial Aid Probation

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

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.

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. We regret any inconvenience this may cause and will work with any affected student.

Class Size

The maximum class size is thirty (30) students per instructor with the following exceptions: FAA Part 147 (Aviation Maintenance Technician 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 on site is ten (10) students and the maximum class size is thirty (30) students.

Distance Education

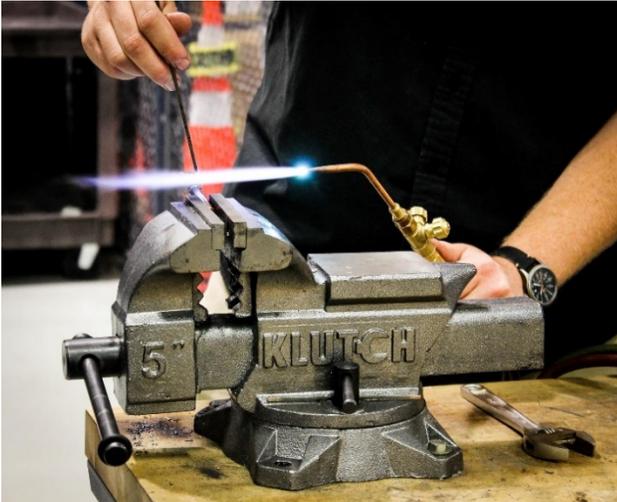
MIAT offers distance education for certain courses. All distance education courses are designated with the symbol ★ next to the Course Number in the Programs of Study section of this catalog. For information on a specific distance education course or any hardware and/or software requirements, please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

18 ACADEMIC POLICIES

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.



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.

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. Good attendance is always encouraged. Standard tuition may apply.

School Hours

Classes are offered on average 4-days per week. Generally, Monday through Thursday (See Academic Calendars). Classes meet between 7:30 am and 2:00 pm for the Day classes and between 5:00 pm and 11:00 pm for Evening classes.

Day Classes

7:30 am - 8:20 am	(8:20 am – 8:30 am) break
8:30 am - 9:20 am	(9:20 am – 9:30 am) break
9:30 am - 10:20 am	(10:20 am – 11:10 am) lunch
11:10 am - 12:00 pm	(12:00 pm – 12:10 pm) break
12:10 pm - 1:00 pm	(1:00 pm – 1:10 pm) break
1:10 pm - 2:00 pm	

Evening Classes

5:00 pm - 5:50 pm	(5:50 pm – 6:00 pm) break
6:00 pm - 6:50 pm	(6:50 pm – 7:00 pm) break
7:00 pm - 7:50 pm	(7:50 pm – 8:00 pm) break
8:00 pm - 8:50 pm	(8:50 pm – 9:00 pm) break
9:00 pm - 9:50 pm	(9:50 pm – 10:00 pm) break
10:00 pm - 10:50 pm	

The school administrative offices are open 8:00 am to 7:00 pm, Monday through Thursday and 8:00 am to 5:00 pm on Friday.

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 will close training operations. The closure of the day program will be announced no later than 5:30 a.m. on the morning of the bad weather. The closure of the afternoon program will be announced no later than 1:30 p.m. on the afternoon of the bad weather.

Student may choose to opt into a text message alert system or the school may be contacted after 5:30 a.m. (Day Classes) and 1:30 p.m. (Afternoon Classes). The phone number for the school is (832) 234-5700. School closure due to inclement weather or other circumstances out of the school’s control will cause the course to be extended.

19 ACADEMIC POLICIES

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 Director of Training 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 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 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.

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 must submit

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 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



20 ACADEMIC POLICIES

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 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.

The right to provide written consent before MIAT discloses personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent:

For example, MIAT discloses education records and/or personally identifiable information from those records without a student's prior written consent under the FERPA exception for disclosure to school officials with a legitimate educational interest.

A "school official" is:

1. a person employed by MIAT 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.

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 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**

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 of 1.7 or higher. Graduates who are free from all indebtedness to the school will be issued a diploma or degree in their program of study.

Graduates who have received their diploma or degree from programs that involve curriculum approved by the Federal Aviation Administration (FAA) must have made up all missed time in each course per class attendance and absenteeism policies in order to qualify for the 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.

21 ACADEMIC POLICIES

Prior to graduation, the pending graduate is required to complete the Exit Interview process. All individual department requirements must be met in order for Student Records to issue a student's program diploma or degree.

Class Attendance and Absence Policy

MIAT believes that regular and punctual attendance is important to achieve success in education and careers. Students are expected to notify the school if they must be absent. All absences are recorded; excused absences are not allowed for programs approved by the Texas Workforce Commission.

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

If a student is absent for more than 20% of the scheduled course time hours in any academic quarter or block, they will be placed on probation for the next academic quarter or block. If a student is absent for more than 20% of the scheduled course time hours during the probationary academic quarter or block, they will be withdrawn.

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 fourteen (14) calendar 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.

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 in 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 only up to the last verified time of attendance.

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, Vice President of Education 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.

22 ACADEMIC POLICIES

A student who withdraws 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.

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 as required by the industry and as is the tradition at MIAT College of Technology. 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, 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 that students must adhere to. All students are issued five approved MIAT College of Technology shirts and they are required attire while attending any activities at MIAT College of Technology.

MIAT College of Technology 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:

23 ACADEMIC POLICIES

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:

College Review Board
c/o MIAT College of Technology
533 NorthPark Central Drive
Houston, TX 77073

Comprehensive Student Complaint and Dispute Resolution System

Primary Resolution System

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

MIAT College of Technology 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 the classroom instructor or if it is not an instructional issue, with the appropriate MIAT staff member or Campus President. 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 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 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 College Review Board. The appeal must be in writing and submitted within 14 calendar days of the student's receipt of the written response to their complaint.

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

College Review Board
c/o MIAT College of Technology
533 NorthPark Central Drive
Houston, TX 77073

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 recommends the student adhere to the following process for seeking assistance:

Level 1: Instructor, or appropriate MIAT staff member (through informal means)

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

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

24 ACADEMIC POLICIES

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 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 to:

Accrediting Commission of Career Schools and Colleges
2101 Wilson Boulevard, Suite 302
Arlington, VA 22201 • (703) 247-4212 • 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.

Texas Campus

Additionally, students have the option of contacting the Texas Workforce Commission or the Texas Higher Education Coordinating Board with any unresolved grievances:

Texas Workforce Commission - Career Schools and
Colleges
101 East 15th Street, Room 226T
Austin, TX 78778-0001 • (512) 936-3100
<http://csc.twc.state.tx.us>.

Texas High Education Coordinating Board
1200 E. Anderson Lane
Austin, TX 78752 • (512) 427-6101
www.theccb.state.tx.us

Programs of Study

Aviation Maintenance Technology-AAS (Degree – Associate in Applied Science) *

The Aviation Maintenance Technology Associate in Applied Science degree 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. 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, and Sheetmetal/Composite Technician), **Engine and Other Machine Assemblers** (Engine Builder, Fuel Injection Technician, Dynamometer Technician, Test Technician) and **Electrical/Electronics** (Control Technician, Instrument Repair Technician, Electronics 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.

* This program has been granted an exemption under Texas Education Code, Section 132.002(a)(8) and, therefore, is not approved or regulated by the Texas Workforce Commission. This program is regulated by the Federal Aviation Administration.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
AIR SCIENCE (GENERAL) SECTION					
AS101-4	Human Factors and History	12	30	42	2.0
AS102-4	Math	18	6	24	1.5
AS103-4	Physics	6	24	30	1.5
AS104-4	Drawings	6	18	24	1.0
AS105-4	Weight and Balance	6	18	24	1.0
AS106-4	FAR's, Maintenance Publications and Limitations	12	24	36	2.0
AS107-4	Tools, Safety and Ground Operations	12	24	36	2.0
AS108-4	Fluid Lines and Fittings	6	18	24	1.0
AS109-4	Cleaning and Corrosion	13	17	30	1.5
AS110-4	Materials and Processes	13	17	30	1.5
AS111-4	Non-Destructive Testing	12	18	30	1.5
AS112-4	Basic Electricity I	25	17	42	2.5
AS113-4	Basic Electricity II	14	22	36	2.0
AS114-4	Basic Electricity III	13	29	42	2.0
AIRFRAME SECTION					
AF201-4	Basic Sheetmetal and Welding Familiarization	30	90	120	6.5
AF202-4	Advanced Sheetmetal	6	114	120	6.0
AF203-4	Non-Metallic Structures	24	42	66	3.5
AF204-4	Assembly and Rigging, Airframe Fire Protection	12	24	36	2.0
AF205-4	Fuel Systems	6	12	18	1.0
AF206-4	Paints and Finishes	12	24	36	2.0
AF207-4	Cabin Atmosphere, Oxygen Systems, Ice and Rain	48	36	84	5.0
AF208-4	Airframe Electrical I	13	23	36	2.0
AF209-4	Airframe Electrical II	24	18	42	2.5
AF210-4	Position and Warning, Principles of Troubleshooting	8	34	42	2.0
AF211-4	Aircraft Instruments, Advanced Troubleshooting	17	31	48	2.5
AF212-4	Navigation and Communication Systems	25	47	72	4.0
AF213-4	Hydraulics and Pneumatics	25	17	42	2.5
AF214-4	Landing Gear Systems	16	26	42	2.0
AF215-4	Airframe Inspection	12	24	36	2.0

26 PROGRAMS OF STUDY

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
POWERPLANT SECTION					
PP201-4	Reciprocating Engine Operation	27	27	54	3.0
PP202-4	Propellers	15	21	36	2.0
PP203-4	Powerplant Lubrication Systems	12	18	30	1.5
PP204-4	Reciprocating Engine Induction and Exhaust	15	15	30	1.5
PP205-4	Reciprocating Engine Fuel Metering Systems	18	18	36	2.0
PP206-4	Reciprocating Engine Ignition Systems	27	27	54	3.0
PP207-4	Reciprocating Engine Instruments	9	9	18	1.0
PP208-4	Reciprocating Engine Inspection and Overhaul	21	63	84	4.5
PP209-4	Reciprocating Engine Troubleshooting	9	9	18	1.0
PP210-4	Turbine Engine Designs	15	21	36	2.0
PP211-4	Turbine Engine Operation	54	30	84	5.0
PP212-4	Turbine Engine Accessories	42	24	66	4.0
PP213-4	Turbine Engine Instruments	18	36	54	3.0
PP214-4	Turbine Engine Maintenance and Overhaul	39	51	90	5.0
PP215-4	Turbine Engine Troubleshooting	12	18	30	1.5
PP216-4	Turbine Engine Fire Protection	12	18	30	1.5
GENERAL EDUCATION SECTION					
GE110-3★	Intermediate Algebra	40	0	40	4.0
GE111-3★	English Composition	40	0	40	4.0
GE112-3★	Public Speaking	40	0	40	4.0
GE113-3★	Introduction to Sociology	40	0	40	4.0
GE114-3★	Environmental Science	40	0	40	4.0
GE115-3★	Organizational Behavior	40	0	40	4.0
Total Credit Hours					134
Total Clock Hours					2,280
Total Quarters					11
Total Months					24

27 PROGRAMS OF STUDY

Airframe and Powerplant Technician (Diploma)*

The Airframe and Powerplant Technician diploma 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. 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, and Sheetmetal/Composite Technician), **Engine and Other Machine Assemblers** (Engine Builder, Fuel Injection Technician, Dynamometer Technician, Test Technician) and **Electrical/Electronics** (Control Technician, Instrument Repair Technician, Electronics Technician, Service Technician).

* This program has been granted an exemption under Texas Education Code, Section 132.002(a)(8) and, therefore, is not approved or regulated by the Texas Workforce Commission. This program is regulated by the Federal Aviation Administration.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
AIR SCIENCE (GENERAL) SECTION					
AS101-4	Human Factors and History	12	30	42	2.0
AS102-4	Math	18	6	24	1.5
AS103-4	Physics	6	24	30	1.5
AS104-4	Drawings	6	18	24	1.0
AS105-4	Weight and Balance	6	18	24	1.0
AS106-4	FAR's, Maintenance Publications and Limitations	12	24	36	2.0
AS107-4	Tools, Safety and Ground Operations	12	24	36	2.0
AS108-4	Fluid Lines and Fittings	6	18	24	1.0
AS109-4	Cleaning and Corrosion	13	17	30	1.5
AS110-4	Materials and Processes	13	17	30	1.5
AS111-4	Non-Destructive Testing	12	18	30	1.5
AS112-4	Basic Electricity I	25	17	42	2.5
AS113-4	Basic Electricity II	14	22	36	2.0
AS114-4	Basic Electricity III	13	29	42	2.0
AIRFRAME SECTION					
AF201-4	Basic Sheetmetal and Welding Familiarization	30	90	120	6.5
AF202-4	Advanced Sheetmetal	6	114	120	6.0
AF203-4	Non-Metallic Structures	24	42	66	3.5
AF204-4	Assembly and Rigging, Airframe Fire Protection	12	24	36	2.0
AF205-4	Fuel Systems	6	12	18	1.0
AF206-4	Paints and Finishes	12	24	36	2.0
AF207-4	Cabin Atmosphere, Oxygen Systems, Ice and Rain	48	36	84	5.0
AF208-4	Airframe Electrical I	13	23	36	2.0
AF209-4	Airframe Electrical II	24	18	42	2.5
AF210-4	Position and Warning, Principles of Troubleshooting	8	34	42	2.0
AF211-4	Aircraft Instruments, Advanced Troubleshooting	17	31	48	2.5
AF212-4	Navigation and Communication Systems	25	47	72	4.0
AF213-4	Hydraulics and Pneumatics	25	17	42	2.5
AF214-4	Landing Gear Systems	16	26	42	2.0
AF215-4	Airframe Inspection	12	24	36	2.0

28 PROGRAMS OF STUDY

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
POWERPLANT SECTION					
PP201-4	Reciprocating Engine Operation	27	27	54	3.0
PP202-4	Propellers	15	21	36	2.0
PP203-4	Powerplant Lubrication Systems	12	18	30	1.5
PP204-4	Reciprocating Engine Induction and Exhaust	15	15	30	1.5
PP205-4	Reciprocating Engine Fuel Metering Systems	18	18	36	2.0
PP206-4	Reciprocating Engine Ignition Systems	27	27	54	3.0
PP207-4	Reciprocating Engine Instruments	9	9	18	1.0
PP208-4	Reciprocating Engine Inspection and Overhaul	21	63	84	4.5
PP209-4	Reciprocating Engine Troubleshooting	9	9	18	1.0
PP210-4	Turbine Engine Designs	15	21	36	2.0
PP211-4	Turbine Engine Operation	54	30	84	5.0
PP212-4	Turbine Engine Accessories	42	24	66	4.0
PP213-4	Turbine Engine Instruments	18	36	54	3.0
PP214-4	Turbine Engine Maintenance and Overhaul	39	51	90	5.0
PP215-4	Turbine Engine Troubleshooting	12	18	30	1.5
PP216-4	Turbine Engine Fire Protection	12	18	30	1.5
Total Credit Hours					110
Total Clock Hours					2,040
Total Quarters					8.5
Total Months					20

29 PROGRAMS OF STUDY

Energy Technology-AAS (Degree – Associate in Applied Science)

The Energy Technology Associate in Applied Science degree program is 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. **Energy Technology program**, graduates will have entry-level career choices in areas 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**. Job titles may include any of the job titles listed for the Industrial Maintenance and/or Wind Power programs described below. Additionally, the general education courses expand and enhance non-technical skills important to the career growth and development of graduates of this program.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
ET101H	Learning Skills, History and Math	34	38	72	4.0
ET102H	OSHA	36	12	48	3.0
ET103H	Tools and Professional Skills	36	12	48	3.0
ET104H	Precision Measuring and Rigging	34	38	72	4.0
ET105H	Materials, Processes and Welding	36	48	84	5.0
ET106H	Inspection	20	16	36	2.0
ET107H	DC Electrical Theory	46	14	60	4.0
ET108H	AC Electrical Theory	46	14	60	4.0
ET109H	Climb and Rescue	20	34	54	3.0
ET110H	Wind Operation and Renewable Energy	30	36	66	4.0
ET111H	Hydraulics and Gears	46	14	60	4.0
ET112H	PLC and SCADA	46	14	60	4.0
ET113H	Gas Turbine and Co-Generation Operation	30	36	66	4.0
ET114H	Gas Turbine Maintenance	26	28	54	3.0
ET115H	Boiler Operation	46	14	60	4.0
ET116H	Steam Operation	46	14	60	4.0
ET209H	Process Systems and Components	46	14	60	4.0
ET210H	Refining Processes and Energy Platform Service	46	14	60	4.0
ET211H	Compression Technology	24	6	30	2.0
ET212H	Advanced Electrical Theory and Troubleshooting	36	54	90	5.0
GENERAL EDUCATION SECTION					
GE110-3 ★	Intermediate Algebra	40	0	40	4.0
GE111-3 ★	English Composition	40	0	40	4.0
GE112-3 ★	Public Speaking	40	0	40	4.0
GE113-3 ★	Introduction to Sociology	40	0	40	4.0
GE114-3 ★	Environmental Science	40	0	40	4.0
GE115-3 ★	Organizational Behavior	40	0	40	4.0
Total Credit Hours					98
Total Clock Hours					1,440
Total Quarters					7
Total Months					16

30 PROGRAMS OF STUDY

Industrial Maintenance Technician (Diploma)

Industrial Maintenance Technician graduates will have entry-level career choices in: **Gas, Coal, Nuclear, Solar, Standby Power, Geothermal, Hydroelectric, Methane/Landfill Gas Generation, Power Distribution and Dispatch, Water Treatment, Equipment Repair and Installation, Testing, Inspecting, Assembly and Production.** Job may titles include: Power Plant Operator, Maintenance Worker/Repairer, Industrial Mechanic, Electrical/Electrician Repairer, Auxiliary Operator, Control Operator, Operations and Maintenance Technician, Field Service Technician, Boiler Operator, Gas Turbine Technician, Quality Control Technician, Millwright, Testing Technician, Telecommunication Technician, Maintenance Apprentice, Generator Technician and Solar Installation Technician.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
ET101H	Learning Skills, History and Math	34	38	72	4.0
ET102H	OSHA	36	12	48	3.0
ET103H	Tools and Professional Skills	36	12	48	3.0
ET104H	Precision Measuring and Rigging	34	38	72	4.0
ET105H	Materials, Processes and Welding	36	48	84	5.0
ET106H	Inspection	20	16	36	2.0
ET107H	DC Electrical Theory	46	14	60	4.0
ET108H	AC Electrical Theory	46	14	60	4.0
ET113H	Gas Turbine and Co-Generation Operation	30	36	66	4.0
ET114H	Gas Turbine Maintenance	26	28	54	3.0
ET115H	Boiler Operation	46	14	60	4.0
ET116H	Steam Operation	46	14	60	4.0
ET209H	Process Systems and Components	46	14	60	4.0
ET210H	Refining Processes and Energy Platform Service	46	14	60	4.0
ET211H	Compression Technology	24	6	30	2.0
ET212H	Advanced Electrical Theory and Troubleshooting	36	54	90	5.0
Total Credit Hours					59
Total Clock Hours					960
Total Quarters					4
Total Months					9

31 PROGRAMS OF STUDY

Wind Power Technician (Diploma)

Wind Power Technician graduates will have entry-level career choices in areas in the wind industry including **Service, Manufacturing, Construction, Commissioning,** and **Sales**. Job titles 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.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
ET101H	Learning Skills, History and Math	34	38	72	4.0
ET102H	OSHA	36	12	48	3.0
ET103H	Tools and Professional Skills	36	12	48	3.0
ET104H	Precision Measuring and Rigging	34	38	72	4.0
ET105H	Materials, Processes and Welding	36	48	84	5.0
ET106H	Inspection	20	16	36	2.0
ET107H	DC Electrical Theory	46	14	60	4.0
ET108H	AC Electrical Theory	46	14	60	4.0
ET109H	Climb and Rescue	20	34	54	3.0
ET110H	Wind Operation and Renewable Energy	30	36	66	4.0
ET111H	Hydraulics and Gears	46	14	60	4.0
ET112H	PLC and SCADA	46	14	60	4.0
Total Credit Hours					44
Total Clock Hours					720
Total Quarters					3
Total Months					7

32 PROGRAMS OF STUDY

HVACR Technician (Diploma)

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.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
HV001-1H	Refrigeration System Fundamentals/Math	46	14	60	4.0
HV002-1H	Service Basics	30	30	60	4.0
HV003-1H	Refrigerants	28	32	60	3.0
HV004-1H	Basic Electricity, Magnetism, and Electronics	46	14	60	4.0
HV005-1H	Motors and Electric Control System	28	32	60	3.0
HV006-1H	Compressors, Valves and Metering Devices	18	42	60	3.0
HV007-1H	EPA 608 Certification	24	36	60	3.0
HV008-1H	Indoor Air Fundamentals	43	17	60	4.0
HV009-1H	Air Conditioning Systems I	30	30	60	4.0
HV010-1H	Heating Systems I	30	30	60	4.0
HV011-1H	Air Conditioning Systems II	24	36	60	3.0
HV012-1H	Heating Systems II/NATE Certification Core	46	14	60	4.0
HV013-1H	Domestic Refrigerators and Freezers	28	32	60	3.0
HV014-1H	Commercial Refrigeration	42	18	60	4.0
HV015-1H	Startup/Shutdown	46	14	60	4.0
HV016-1H	Installing and Servicing Commercial Systems	30	30	60	4.0
Total Credit Hours					58
Total Clock Hours					960
Total Quarters					4
Total Months					9

33 PROGRAMS OF STUDY

Advanced Welding Technology (Diploma)

The Advanced Welding Technology 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.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
WT101	Welding Core I	38	22	60	4.0
WT102	Welding Core II	36	24	60	4.0
WT103	Shielded Metal Arc Welding I	38	82	120	7.0
WT104	SMAW II, Drawings, Symbols, Metal Characteristics	24	96	120	6.0
WT105	GMAW/FCAW/GTAW Equip/Filler Metals w/Plate	22	98	120	6.0
WT106	Shielded Metal Arc Open Root Pipe Welds	12	108	120	6.0
WT107	GMAW Pipe Welding	12	48	60	3.0
WT108	FCAW Pipe Welding	10	50	60	3.0
WT109	GTAW Pipe Welding	12	108	120	6.0
WT110	GTAW Low Alloy Pipe Welding	12	108	120	6.0
Total Credit Hours					51
Total Clock Hours					960
Total Quarters					4
Total Months					9

Welding Technology (Diploma)

The **Welding Technology 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.

		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
WT101	Welding Core I	38	22	60	4.0
WT102	Welding Core II	36	24	60	4.0
WT103	Shielded Metal Arc Welding I	38	82	120	7.0
WT104	SMAW II, Drawings, Symbols, Metal Characteristics	24	96	120	6.0
WT105	GMAW/FCAW/GTAW Equip/Filler Metals w/Plate	22	98	120	6.0
WT106	Shielded Metal Arc Open Root Pipe Welds	12	108	120	6.0
WT107	GMAW Pipe Welding	12	48	60	3.0
WT108	FCAW Pipe Welding	10	50	60	3.0
Total Credit Hours					51
Total Clock Hours					960
Total Quarters					4
Total Months					9

34 PROGRAMS OF STUDY

Shielded Metal Arc Welding (Diploma) *This program is not eligible for Title IV funds*

The **Shielded Metal Arc Welding 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 shielded metal arc welding including base metal selection and preparation, welding equipment selection and set-up and weld evaluation and inspection. A sample of job titles include: Shielded Metal Arc Welder.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
WT101	Welding Core I	38	22	60	4.0
WT102	Welding Core II	36	24	60	4.0
WT103	Shielded Metal Arc Welding I	38	82	120	7.0
WT104	SMAW II, Drawings, Symbols, Metal Characteristics	24	96	120	6.0
Total Credit Hours					21
Total Clock Hours					360
Total Quarters					1.5
Total Months					3

35 PROGRAMS OF STUDY

Non-Destructive Testing (NDT) Advanced Technician (Diploma)

The **NDT Advanced Technician** builds upon the foundation of the NDT technician program to allow students to broaden their skill set within the NDT industry to offer greater job advancement and flexibility. Graduates of this program will be introduced to all the primary areas of Non-Destructive testing; Visual Penetrant, Eddy Current, Magnetic Particle, Ultrasound and Radiography. Utilizing industry standard Material Data Safety Sheets (MSDS) and the operation manuals students will achieve MIAT certified Level II in all areas except Radiography. Level I will be reached in this area. This certification will allow entry level work into a variety of industries including oil and gas, power generation, manufacturing, general fabrication, research and development and aviation.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
NDT101H	Visual Theory and Application I	12	48	60	3.0
NDT102H	Penetrant Theory and Application I	12	48	60	3.0
NDT103H	Eddy Current Theory and Application I	38	82	120	7.0
NDT104H	Visual Theory and Application II	12	48	60	3.0
NDT105H	Penetrant Theory and Application II	12	48	60	3.0
NDT106H	Eddy Current Theory and Application II	38	82	120	7.0
NDT107H	Magnetic Particle Theory and Application I	20	70	90	5.0
NDT108H	Magnetic Particle Theory and Application II	20	70	90	5.0
NDT109H	Ultrasound Theory and Application I	10	50	60	3.0
NDT110H	Radiography Theory I	10	50	60	3.0
NDT111H	Ultrasound Theory and Application II	35	145	180	10.0
Total Credit Hours					52
Total Clock Hours					960
Total Quarters					4
Total Months					9

Non-Destructive Testing (NDT) Technician (Diploma)

The **NDT Technician** is designed to prepare graduates for a variety of entry-level positions in the field of NDT in a variety of technical industries such as oil and gas, power generation, manufacturing, general fabrication, research and development and Aviation. The program encompasses both theoretical and hands-on training in all phases of NDT including material preparation, equipment selection and operation and test result interpretation. Publications such as MSDS and operation manuals will be included throughout this training. Graduates will meet the standard for Level I and Level II MIAT certified training for Visual, Penetrant, Eddy Current and Magnetic Particle and for Level I in Ultrasound.

COURSES		Theory Hours	Lab Hours	Total Clock Hours	Total Credit Hours
TECHNICAL COURSES					
NDT101H	Visual Theory and Application I	12	48	60	3.0
NDT102H	Penetrant Theory and Application I	12	48	60	3.0
NDT103H	Eddy Current Theory and Application I	38	82	120	7.0
NDT104H	Visual Theory and Application II	12	48	60	3.0
NDT105H	Penetrant Theory and Application II	12	48	60	3.0
NDT106H	Eddy Current Theory and Application II	38	82	120	7.0
NDT107H	Magnetic Particle Theory and Application I	20	70	90	5.0
NDT108H	Magnetic Particle Theory and Application II	20	70	90	5.0
NDT109H	Ultrasound Theory and Application I	10	50	60	3.0
Total Credit Hours					39
Total Clock Hours					720
Total Quarters					3
Total Months					7

Course Descriptions

Aviation Maintenance Technology - AAS Airframe and Powerplant Technician

Air Science (General) Courses

AS101-4 Human Factors and History | 2.0 Quarter Credits

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. (12 Didactic Hours, 30 Lab Hours)

AS102-4 Math | 1.5 Quarter Credits

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. (18 Didactic Hours, 6 Lab Hours)

AS103-4 Physics | 1.5 Quarter Credits

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. (6 Didactic Hours, 24 Lab Hours)

AS104-4 Drawings | 1.0 Quarter Credits

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. (6 Didactic Hours, 18 Lab Hours)

AS105-4 Weight and Balance | 1.0 Quarter Credits

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. (6 Didactic Hours, 18 Lab Hours)

AS106-4 FARs and Maintenance Publications and Limitations | 2.0 Quarter Credits

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. (12 Didactic Hours, 24 Lab Hours)

AS107-4 Tools, Safety and Ground Operations | 2.0 Quarter Credits

Students will receive instruction in the criteria for selecting the proper tool for a job, whether it is a hand tool or power. The student will then learn how to properly and safely use the tools that are essential to the aviation technician. Students are taught hangar safety, starting of aircraft, directing aircraft for taxi, tying down of aircraft and jacking an aircraft. (12 Didactic Hours, 24 Lab Hours)

AS108-4 Fluid Lines and Fittings | 1.0 Quarter Credits

The student will acquire knowledge and skills, based on standard industry practices, to fabricate and install rigid and flexible fluid lines and fittings used in various aircraft systems. (6 Didactic Hours, 18 Lab Hours)

AS109-4 Cleaning and Corrosion | 1.5 Quarter Credits

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. (13 Didactic Hours, 17 Lab Hours)

37 COURSE DESCRIPTIONS

AS110-4 Materials and Processes

| 1.5 Quarter Credits

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. (13 Didactic Hours, 17 Lab Hours)

AS111-4 Non-Destructive Testing (NDT)

| 1.5 Quarter Credits

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. (12 Didactic Hours, 18 Lab Hours)

AS112-4 Basic Electricity I | 2.5 Quarter Credits

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. (25 Didactic Hours, 17 Lab Hours)

AS113-4 Basic Electricity II | 2.0 Quarter Credits

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. (14 Didactic Hours, 22 Lab Hours)

AS114-4 Basic Electricity III

| 2.0 Quarter Credits

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. (13 Didactic Hours, 29 Lab Hours)

Airframe Courses

AF201-4 Basic Sheetmetal and Welding

Familiarization | 6.5 Quarter Credits

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. (30 Didactic Hours, 90 Lab Hours)

AF202-4 Advanced Sheetmetal

| 6.0 Quarter Credits

Students will develop advanced skills and techniques used in the work place. 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. (6 Didactic Hours, 114 Lab Hours)

AF203-4 Non-Metallic Structures

| 3.5 Quarter Credits

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. (24 Didactic Hours, 42 Lab Hours)

AF204-4 Assembly and Rigging and Airframe Fire Protection

| 2.0 Quarter Credits

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. (12 Didactic Hours, 24 Lab Hours)

AF205-4 Fuel Systems | 1.0 Quarter Credits

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. (6 Didactic Hours, 12 Lab Hours)

38 COURSE DESCRIPTIONS

AF206-4 Paints and Finishes | 2.0 Quarter Credits
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. (12 Didactic Hours, 24 Lab Hours)

AF207-4 Cabin Atmosphere, Oxygen Systems, Ice/Rain | 5.0 Quarter Credits
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. (48 Didactic Hours, 36 Lab Hours)

AF208-4 Airframe Electrical I
| 2.0 Quarter Credits
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. (13 Didactic Hours, 23 Lab Hours)

AF209-4 Airframe Electrical II
| 2.5 Quarter Credits
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. (24 Didactic Hours, 18 Lab Hours)

AF210-4 Position and Warning and Principles of Troubleshooting
| 2.0 Quarter Credits
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. (8 Didactic Hours, 34 Lab Hours)

AF211-1 Aircraft Instruments and Advanced Troubleshooting
| 2.5 Quarter Credits
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 work place and develop an understanding of one or more specific avionics system utilized in today's aircraft. (17 Didactic Hours, 31 Lab Hours)

AF212-4 Navigation and Communication Systems
| 4.0 Quarter Credits
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. (25 Didactic Hours, 47 Lab Hours)

AF213-4 Hydraulics and Pneumatics
| 2.5 Quarter Credits
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. (25 Didactic Hours, 17 Lab Hours)

AF214-4 Landing Gear Systems
| 2.0 Quarter Credits
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. (16 Didactic Hours, 26 Lab Hours)

39 COURSE DESCRIPTIONS

AF215-4 Airframe Inspection

| 2.0 Quarter Credits

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. (12 Didactic Hours, 24 Lab Hours)

Powerplant Courses

PP201-4 Reciprocating Engine Operations

| 3.0 Quarter Credits

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. (27 Didactic Hours, 27 Lab Hours)

PP202-4 Propellers | 2.0 Quarter Credits

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. (15 Didactic Hours, 21 Lab Hours)

PP203-4 Powerplant Lubrication Systems

| 1.5 Quarter Credits

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. (12 Didactic Hours, 18 Lab Hours)

PP204-4 Reciprocating Engine Induction and Exhaust | 1.5 Quarter Credits

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. (15 Didactic Hours, 15 Lab Hours)

PP205-4 Reciprocating Engine Fuel Metering Systems | 2.0 Quarter Credits

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, the injectors and their operation will be included in this course. (18 Didactic Hours, 18 Lab Hours)

PP206-4 Reciprocating Engine Ignition Systems

| 3.0 Quarter Credits

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. (27 Didactic Hours, 27 Lab Hours)

PP207-4 Reciprocating Engine Instrument Systems | 1.0 Quarter Credits

The student will learn to troubleshoot, service and repair electrical and mechanical fluid rate-of-flow indicating systems; and inspect, check, service, troubleshoot, and repair electrical and mechanical engine temperature, pressure, and r.p.m. indicating systems. (9 Didactic Hours, 9 Lab Hours)

PP208-4 Reciprocating Engine Inspection and Overhaul | 4.5 Quarter Credits

This course includes inspection, servicing, repair and overhaul of opposed engines. Standard 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. (21 Didactic Hours, 63 Lab Hours)

40 COURSE DESCRIPTIONS

PP209-4 Reciprocating Engine Troubleshooting

| 1.0 Quarter Credits

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. (9 Didactic Hours, 9 Lab Hours)

PP210-4 Turbine Engine Design

| 2.0 Quarter Credits

This course is designed to develop an understanding of the designs of turbine engines used on aircraft to include turbojet engines, turboprop 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. (15 Didactic Hours, 21 Lab Hours)

PP211-4 Turbine Engine Operation

| 5.0 Quarter Credits

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. (54 Didactic Hours, 30 Lab Hours)

PP212-4 Turbine Engine Accessories

| 4.0 Quarter Credits

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. (42 Didactic Hours, 24 Lab Hours)

PP213-4 Turbine Engine Instruments

| 3.0 Quarter Credits

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. (18 Didactic Hours, 36 Lab Hours)

PP214-3 Turbine Engine Maintenance/ Overhaul

| 5.0 Quarter Credits

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. (39 Didactic Hours, 51 Lab Hours)

PP215-4 Turbine Engine Troubleshooting

| 1.5 Quarter Credits

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. (12 Didactic Hours, 18 Lab Hours)

PP216-4 Powerplant Fire Protection

| 1.5 Quarter Credits

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. (12 Didactic Hours, 18 Lab Hours)

Energy Technology - AAS Industrial Maintenance Technician Wind Power Technician

ET101H Learning Skills, History and Math | 4.0 Quarter Credits

In this course the student will learn how to succeed in their post-secondary education program by learning strategy skills such as basic computer and software application, time management, study and testing techniques, note taking and other similar skills. This course reviews the history of the energy industry up to and including present. Also included in this course is 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 learn basic math and formulas which will be encountered and used by the technician in performing daily activities. In this course the student will also learn how to read, convert and understand the metric system of measurement. (34 Didactic Hours, 38 Lab Hours)

ET102H OSHA | 3.0 Quarter Credits

Students will learn the safety required in the field while performing tasks on the job. Lock-Out Tag-Out procedures will be learned and demonstrated. This class will approach safety from a behavioral prevention standpoint. General shop safety and material handling will be covered as well as regulatory compliance. The student will learn how to function safely and understand the importance of compliance when on the site at a power generation facility. Emergency Response will be discussed and reinforced through case studies. (36 Didactic Hours, 12 Lab Hours)

ET103H Tools and Professional Skills | 3.0 Quarter Credits

The student will learn the criteria used when selecting the proper tool for the task, whether it is a hand or power tool. Students will learn general shop safety and the importance of preventing damage to components when using tools. The importance of personal protective equipment is emphasized to help ensure a safe working environment. Concepts such as professional behavior on and off the job will be examined. The student will learn the proper code of conduct required to ensure success when working on the road with little or no supervision. Additional subjects learned will include how to manage expenses, the expectation of an employer regarding attendance and job performance and global etiquette when overseas. Another factor emphasized is the ability to learn from experienced technicians in the field during on-the-job training. (36 Didactic Hours, 12 Lab Hours)

ET104H Precision Measuring and Rigging | 4.0 Quarter Credits

The student will learn the proper use and interpretation of precision measuring devices such as micrometers, calipers, depth gauges and gap measuring devices. This course will include both standard and metric tooling to teach the student about the equipment that will be encountered in the field. The student will learn basic skills based on standard industry practices. Safety will be emphasized and will prepare the student to participate in lifting and rigging on-the-job training when they enter the power generation field. The student will demonstrate the skills they have learned by participating in an actual lift operation. (34 Didactic Hours, 38 Lab Hours)

ET105H Materials, Processes and Welding | 5.0 Quarter Credits

In this course the student learns to recognize, properly select and use a variety of hardware and materials used in the repair and maintenance of energy technology equipment. Proper filing and honing techniques are demonstrated. Students will demonstrate what they have learned by identifying and installing specialty hardware such as Heli-Coil inserts as well as become proficient at the use of easy outs and drilling without damaging the surrounding structure. Skills learned will include standard practices such as safety wire and the use of torque wrenches. Basic composite identification will be included in this training. The student will learn how to weld safely and the techniques used in a maintenance environment. Skills such as heating bolts and components without doing damage to the materials is learned and demonstrated. Basic skills such as how to successfully complete a tack weld is demonstrated and practiced by the student. Proper heating and installation of bolts is also learned in this course. Specific procedures when accomplishing “hot work” will also be learned. (36 Didactic Hours, 48 Lab Hours)

ET106H Inspection | 2.0 Quarter Credits

In this course the student will learn various inspection techniques employed in the field. These inspection techniques will include visual, borescopic and dye penetrant. Advanced methods such as eddy current and magnetic particle will be demonstrated. The importance of recognizing degrees of damage and distinguishing between negligible and serious flaws will be learned. The student will demonstrate what they have learned by inspecting various valves and other assigned power equipment. (20 Didactic Hours, 16 Lab Hours)

42 COURSE DESCRIPTIONS

ET107H DC Electrical Theory | 4.0 Quarter Credits

The students will learn electrical theory and principles, and their application to power generation systems. This course is designed to teach the student electrical circuit diagrams, including charging and storage functions. This will include circuit operation and electrical fundamentals, which will prepare the student for basic electrical functions and troubleshooting. Generator design and operation will be demonstrated and learned. Students will also learn basic electricity concepts and schematic interpretation. (46 Didactic Hours, 14 Lab Hours)

ET108H AC Electrical Theory | 4.0 Quarter Credits

The students will learn AC 3-phase electrical theory and principles, and their application to power generation systems. This course is designed to teach the student about AC electrical circuit diagrams, including solid state devices and logic functions. This will include electrical component operation and electrical fundamentals needed for advanced electrical functions and troubleshooting. (46 Didactic Hours, 14 Lab Hours)

ET109H Climb and Rescue | 3.0 Quarter Credits

In this course the student will learn the hazards involved when climbing a wind turbine tower. The student will learn safety issues such as where and when to take a rest period during the climb. Emergency measures such as rescue from a tower will be learned and demonstrated. The student will demonstrate what they have learned by performing a safety inspection on a given piece of climb equipment correctly. (20 Didactic Hours, 34 Lab Hours)

ET110H Wind Operation and Renewable Energy .. | 4.0 Quarter Credits

In this course the student will learn function and design of wind turbines in the power generation field. Students will demonstrate what they have learned by identifying the various major components and their relationship to the wind turbine. In this course the student will learn renewable energy systems other than wind turbines. The student will learn about other systems such as solar, biomass and geothermal during this course. (30 Didactic Hours, 36 Lab Hours)

ET111H Hydraulics and Gears | 4.0 Quarter Credits

In this course the student will learn about hydraulic power and its function in the wind turbine industry. Fluid types, system inspection, and component identification will be learned. System troubleshooting will be demonstrated and applied in this course. In this course the student will learn the maintenance and inspections required for gear trains and lubrication systems. Inspection of fluids and gear condition will be learned and reinforced through hands-on inspection activities. Proper and improper wear in gear systems will be inspected and identified. (46 Didactic Hours, 14 Lab Hours)

ET112H PLC and SCADA | 4.0 Quarter Credits

In this course the student will learn about Programmable Logic Controllers (PLC) and their use in the wind field as well as other industrial applications. Students will develop and install a simple program and execute same using a human mechanical interface system. In this course the student will learn about Supervisory Control and Data Acquisition (SCADA) systems and their use in the field of wind energy. Remote recording and correction will also be learned by the student. The data tracking and resulting trend monitoring will be examined. (46 Didactic Hours, 14 Lab Hours)

ET113H Gas Turbine and Co-Generation Operation | 4.0 Quarter Credits

In this course the student will learn about gas turbine engines beginning with the history of the development of turbines followed by a study of the major sections of a typical turbine engine. Common accessories employed by gas turbine engines will be presented and discussed. Instrumentation and control systems will be learned and examined to help determine proper performance and assist in troubleshooting skills. The efficiencies derived from combined cycle power generation will be learned by the student. The student will demonstrate what they have learned through identification and explanation of the major components found in a co-generation facility. (30 Didactic Hours, 36 Lab Hours)

ET114H Gas Turbine Maintenance | 3.0 Quarter Credits

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. (26 Didactic Hours, 28 Lab Hours)

ET115H Boiler Operation | 4.0 Quarter Credits

In this course the student will learn 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. Safety is reinforced in this course and HAZMAT is introduced to the student. In this class the student will learn the basic operation and design 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. (46 Didactic Hours, 14 Lab Hours)

43 COURSE DESCRIPTIONS

ET116H Steam Operation | 4.0 Quarter Credits

The students will learn about steam turbines beginning with the history of the development of steam turbines followed by a study of the major sections of a typical steam turbine. Common accessories employed by steam turbines will be presented and discussed. Instrumentation and control systems will be explained and examined to help determine proper performance and assist in troubleshooting skills. This course is designed to develop an understanding of the scheduled and nonscheduled maintenance required for steam turbines. The overhaul process will be discussed with hands-on demonstrations and will further foster an understanding of the steam turbine operation. (46 Didactic Hours, 14 Lab Hours)

ET209H Process Systems and Components

| 4.0 Quarter Credits

The students will learn process plant drawings and diagrams from a systems point of view. The concept of system integration will be emphasized as the student learns how systems interact with each other. The student will learn at an introductory level how to perform basic pipefitting operations. Heat sources used in process technology will be identified and explained to the student. The students will also learn about the theory of operation utilized in heat exchangers. (46 Didactic Hours, 14 Lab Hours)

ET210H Refining Process/Energy Platform Service

| 4.0 Quarter Credits

The students will learn about the basic principles of distillation systems, extraction/separation systems and chemical reactor systems including catalytic cracking, hydrocracking, distillation columns, absorbers and the scrubbing process. The student will learn the safety rules and practices found on an energy platform such as a drilling operation. Technology used on an energy platform will be learned by the student such as preventative equipment maintenance, forced maintenance and troubleshooting. Technology such as fracturing, and slant drilling will be learned as well. (46 Didactic Hours, 14 Lab Hours)

ET211H Compression Technology

| 2.0 Quarter Credits

The students will learn an overview of the various pieces of compression equipment found in industry. Specific equipment such as screw, piston and centrifugal compressors will be examined. The basic theory behind compression and the equipment used to achieve this goal will be discussed, diagramed and learned by the student. Standard inspection and preventative maintenance practices will be demonstrated and practiced in this class. The selection and use of proper tooling and standard maintenance practices will be emphasized in this course. (24 Didactic Hours, 6 Lab Hours)

ET212H Advanced Electrical Theory and Troubleshooting

| 5.0 Quarter Credits

The student will be introduced to three-phase electric power, a common method of alternating-current electric power generation, transmission and distribution. The student will learn the concept of troubleshooting from a theoretical position. Input and output into a situation is examined and a logical flow is developed to determine the critical path of failure. The student will demonstrate what they have learned through the use of mock-ups and other pieces of equipment with known faults in an economical manner. In this class the student will learn an overview of the operation and design of diesel power plants. The specific application to standby power for diesel will be emphasized. Inspection, preventative maintenance and troubleshooting will be explained and demonstrated. Subsystems such as fuel control and emissions will also be included in this training. The student will demonstrate what they have learned by performing assigned hands-on project in the lab. (36 Didactic Hours, 54 Lab Hours)

None of the above courses require completion of previous college courses. The courses have no prerequisites.

44 Course Descriptions

HVACR Technician

HV001H Refrigeration System Fundamentals and Math | 4.0 Quarter Credits

This course begins with a study of basic math and mathematical formulas which will be encountered and used by the technician in performing daily activities. Fundamentals of refrigeration including enthalpy, combined gas law, compression, and absorption will be explored. (46 Didactic Hours, 14 Lab Hours)

HV002H Service Basics | 4.0 Quarter Credits

The student will receive instruction in the criteria for selecting the proper tool for a job. 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 HVACR Technician. Students are taught to use a variety of electrical, pressure and temperature measuring devices. In addition, students will also use sheet metal tools necessary for assembling ductwork. (45 Didactic Hours, 15 Lab Hours)

HV003H Refrigerants | 3.0 Quarter Credits

The student will learn the characteristics and applications of pure and blended refrigerants, and understand the various lubricating oils used in refrigeration systems. This class exposes the students to operating principles of compressors used in comfort air conditioning and refrigeration systems. Included are installation, service and repair procedures. (10 Didactic Hours, 50 Lab Hours)

HV004H Basic Electricity, Magnetism and Electronics | 4.0 Quarter Credits

In this course the student will be introduced to electrical theory and principles and their application to HVACR systems. This course also introduces DC and AC circuit operation and electrical fundamentals. Basics such as ohm's law, relays and transformers will be included. (46 Didactic Hours, 14 Lab Hours)

HV005H Motors and Electric Control Systems | 3.0 Quarter Credits

The student will learn the function of various electrical components and functions such as transformers, single-phase and three-phase power distribution, capacitors, the theory and operation of induction motors and the instruments and techniques used in testing AC circuits and components. This class also reviews electrical safety and explains the theory of solid-state electronics, as well as the operation, use and testing of electronic components used in HVACR equipment. This class will familiarize the students with the operation, testing and adjustment of conventional and electronic thermostats, as well as the operation of common electrical, electronic, and pneumatic circuits used to control HVACR systems. This class also explains how

to analyze circuit diagrams for electronic and microprocessor-based controls used in comfort heating and cooling equipment and how to troubleshoot systems that use these controls. The students will be exposed to the tools, instruments and techniques used in troubleshooting gas heating appliances, including how to isolate and correct faults. Also covered are the techniques and equipment used in troubleshooting cooling equipment, focusing on analyzing system temperatures and pressures to isolate faults. (12 Didactic Hours, 48 Lab Hours)

HV006H Compressors, Valves and Metering Devices | 3.0 Quarter Credits

This course will introduce the various types of compressors and components that are found in typical HVACR systems. The student will learn the operating principles, applications, installation and adjustment of fixed and adjustable expansion devices used in refrigeration equipment. (14 Didactic Hours, 46 Lab Hours)

HV007H EPA 608 Certification | 3.0 Quarter Credits

The student will be introduced to EPA regulations, recovery requirements, leak detection and repair. At the end of this course the student will be able to take the examination for the EPA 608 Universal Certification. (14 Didactic Hours, 46 Lab Hours)

HV008H Indoor Air Fundamentals | 4.0 Quarter Credits

The student will examine air movement, measurement, air quality, distribution and ventilation system service during this course. (45 Didactic Hours, 15 Lab Hours)

HV009H Air Conditioning Systems I | 4.0 Quarter Credits

The student will learn the principles of ductless and central air-conditioning systems as well as absorption and evaporative cooling and the operation of components and their location. (45 Didactic Hours, 15 Lab Hours)

HV010H Heating Systems I | 4.0 Quarter Credits

The student will learn the fundamentals of forced-air, hydronic, heat pumps and gas fired heating systems and will learn the operation of components of the systems and typical configurations in the industry. (45 Didactic Hours, 15 Lab Hours)

HV011H Air Conditioning Systems II | 3.0 Quarter Credits

45 COURSE DESCRIPTIONS

This class expands on what was learned in Air Conditioning Systems I. The student will also be exposed to humidity control, thermostats, heating and cooling loads. This course also familiarizes the student with air conditioning installation, troubleshooting and service. (12 Didactic Hours, 48 Lab Hours)

HV012H Heating Systems II and NATE Certification

| 4.0 Quarter Credits

This class expands on what was learned in Heating Systems I. The student will learn about oil fired and electric heating systems. This course familiarizes the student with installation and service. The student will also be prepared to take the North American Technician Excellence (NATE) core exam. (46 Didactic Hours, 14 Lab Hours)

HV013H Domestic Refrigerators and Freezers

| 3.0 Quarter Credits

The student will engage in study of domestic refrigerators and freezers. The student will learn the systems and components of these units. This class also engages the student with installation, troubleshooting, service and repair of domestic refrigerators and freezers. (14 Didactic Hours, 46 Lab Hours)

HV014H Commercial Refrigeration

| 4.0 Quarter Credits

The student will be 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. (45 Didactic Hours, 15 Lab Hours)

HV015H Startup and Shutdown

| 4.0 Quarter Credits

The students will learn the procedures for the startup of hot water, steam heating, chilled water, and forced-air distribution systems after initial equipment installation or after an extended period of shutdown. Also included are the procedures for preparing these systems for extended shutdown. (45 Didactic Hours, 15 Lab Hours)

HV016H Installing and Servicing Commercial

Systems | 4.0 Quarter Credits

The students will learn how to install and service commercial systems. This class will involve troubleshooting by system diagnosis and component diagnosis. (45 Didactic Hours, 15 Lab Hours)

None of the above courses require completion of previous college courses. The courses have no prerequisites.

Shielded Metal Arc Welding Welding Technology Advanced Welding Technology

WT101H Welding Core I | 4.0 Quarter Credits

This course explains the safety obligations of workers, supervisors, and managers to ensure a safe workplace and complies with OSHA-10 training requirements. The causes and results of accidents and the impact of accident costs will be discussed. Safe work procedures, proper use of personal protective equipment, and working with hazardous chemicals are defined and practiced. The student will learn to identify other potential construction hazards, including hazardous material exposures, welding and cutting hazards and confined spaces. The student will gain an understanding of the use of safety equipment, protective clothing, and procedures applicable to the cutting and welding of metals. The course introduces students to hand tools that are widely used in the construction industry, such as hammers, saws, levels, pullers, and clamps and explains the specific applications of each tool and how to use them properly. The importance of safety and maintenance issues related to hand tools is emphasized. In this class, the student will learn how to work safely with shop equipment, welding equipment as well as standard tools used in the welding industry. Recognizes hazards associated with materials handling and explains proper materials handling techniques and procedures. The course introduces materials handling equipment and identifies appropriate equipment for common job-site tasks. The student will learn basic material handling procedures and hazard identification found in the field of welding. Identifies the roles of individuals and companies in the construction industry. (38 Didactic Hours, 22 Lab Hours)

WT102H Welding Core II | 4.0 Quarter Credits

This course reviews basic mathematical functions and explains their applications to the construction trades. How to use and read various length measurement tools, including standard and metric rulers and tape measures, and the architect's and engineer's scales is explained. The course familiarizes students with basic terms for construction drawings, components, and symbols, explains the different types of drawings (civil, architectural, structural, mechanical, plumbing/piping, electrical, and fire protection) and instructs students on how to interpret and use drawing dimensions. In this class the student will learn how to apply math skills to practical work interpretation of various drawings found in the field of welding. Introduces students to critical thinking, problem solving skills, and computer systems and their industry applications. Students will learn techniques for communicating effectively with co-workers and supervisors. Students will learn how they are expected to conduct themselves in a professional. The course explains the safety requirements for oxyfuel cutting,

identifies oxyfuel cutting equipment and setup requirements. The student will learn how to light, adjust, and shut down oxyfuel equipment. Students will perform cutting techniques that include straight line, piercing, bevels, washing, and gouging. Plasma arc cutting equipment and safe work area preparation and explained. The student will learn to identify correct amperage, gas pressures, and flow rates and plasma-arc cutting methods for piercing, slotting, squaring, and beveling metals. Air carbon arc cutting equipment and processes are discussed. The student will know how to safely and properly use cutting equipment in the welding field including oxyfuel, plasma and air carbon cutting equipment. (36 Didactic Hours, 24 Lab Hours)

WT103H Shielded Metal Arc Welding I

| 7.0 Quarter Credits

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 joists. 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 insure 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, identifies the use of codes and explains groove welds and how to set up welding equipment for making groove welds. The student will learn how to make groove welds with backing and the procedures for making flat, horizontal, vertical, and overhead groove welds. The student will learn about open v-groove welds and how to set up welding equipment for making open v-groove welds. Procedures for making flat, horizontal, vertical, and overhead open v-groove weld are discussed. The student will learn how to accomplish a quality weld on an open V configuration SMAW equipment. (38 Didactic Hours, 82 Lab Hours)

47 COURSE DESCRIPTIONS

WT104H Shielded Metal Arc Welding II, Drawings, Symbols and Metal Characteristics | 6.0 Quarter Credits

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 on plate material. Identifies and explains welding detail drawings. Describes lines, fills, object views, and dimensioning on drawings. Explains how to use notes on drawings and the bill of materials. Identifies and explains the different parts of a welding symbol. Describes different types of fillet weld, groove weld, and nondestructive examination symbols. Explains how to read welding symbols on drawings, specifications, and welding procedure specifications. Students will know how to interpret detailed drawings and the symbols used in their construction. Explains preheating, interpass temperature control, and post heating procedures that sometimes need to be done to preserve weldment strength, ductility, and weld quality. Covers the equipment used for heat treatment of metals. Explains physical characteristics, mechanical properties, composition, and classification of common ferrous and nonferrous metals. Identifies the various standard metal forms and structural shapes. Covers visual inspection, magnetic testing, and X-ray fluorescent spectrometry methods used to identify metals. The student will learn pre-heat and post-heat procedures commonly used in the welding process. Heat treatment and the physical properties of metal will also be learned. (24 Didactic Hours, 96 Lab Hours)

WT105H GMAW/FCAW/GTAW Equipment and Filler Metals with Plate | 6.0 Quarter Credits

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. Explains how to set up and use GMAW and FCAW equipment. Explains how to set up GMAW and FCAW equipment and build a pad of stringer beads and weave beads using filler metals and shielding gas. Explains procedures to perform GMAW multipass fillet welds on plate in various positions. The student will learn how to use GMAW and FCAW welding equipment to complete a quality weld on plate material. Explains GTAW safety. Identifies and explains the use of GTAW equipment, filler metals, and shielding gases. Covers the setup of GTAW equipment. Describes how to pad in all positions using GTAW and carbon steel filler metal. 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 GTAW equipment to perform a quality weld on plate material. (22 Didactic Hours, 98 Lab Hours)

WT106H Shielded Metal Arc Welding Open-Root Pipe Welding | 6.0 Quarter Credits

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 carbon steel pipe. 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 pipe material using SMAW equipment. (12 Didactic Hours, 108 Lab Hours)

WT107H GMAW Pipe Welding | 3.0 Quarter Credits

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 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. (12 Didactic Hours, 48 Lab Hours)

WT108H FCAW Pipe Welding | 3.0 Quarter Credits

This course explains how to set up FCAW equipment. Covers the procedures and techniques used to make V-groove pipe welds with FCAW in the 1G-ROTATED, 2G, 5G, and 6G positions. The student will learn how to complete a quality weld on pipe using FCAW equipment. (10 Didactic Hours, 50 Lab Hours)

WT109H GTAW Pipe Welding | 6.0 Quarter Credits

Explains how to set up GTAW equipment. 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 pipe. The student will learn how to complete a quality weld on pipe using GTAW equipment. (12 Didactic Hours, 108 Lab Hours)

WT110H GTAW Low Alloy and Stainless-Steel Pipe Welding | 6.0 Quarter Credits

Explains how to set up GTAW equipment. Covers the procedures and techniques used to make V-groove pipe welds with GTAW in the 2G, 5G, and 6G positions for low-alloy and stainless-steel pipe. The student will learn how to weld on low alloy steel and stainless-steel pipe using GTAW equipment. (12 Didactic Hours, 108 Lab Hours)

None of the above courses require completion of previous college courses. The courses have no prerequisites.

Non-Destructive Testing Technician Non-Destructive Testing Advanced Technician

NDT101H Visual Theory and Application I

| 2.0 Quarter Credits

This course explains the theory of visual inspection and incorporates the didactic information required to achieve a Level I certification in this program. The equipment used will be presented, explained and demonstrated. Upon completion the student will have gained an understanding of the theory employed in Visual NDT. (12 Didactic Hours, 48 Lab Hours)

NDT102H Penetrant Theory and Application I

| 2.0 Quarter Credits

This course explains the theory of penetrant inspection and incorporates the didactic information required to achieve a Level I certification in this program. The equipment used will be presented, explained and demonstrated. Upon completion the student will have gained an understanding of the theory employed in Penetrant NDT. (12 Didactic Hours, 48 Lab Hours)

NDT103H Eddy Current Theory and Application I

| 9.0 Quarter Credits

This course explains the theory of eddy current inspection and incorporates the didactic information required to achieve a Level I certification in this program. The equipment used will be presented, explained and demonstrated. Upon completion the student will have gained an understanding of the theory employed in Eddy Current NDT. (38 Didactic Hours, 82 Lab Hours)

NDT104H Visual Theory/Application II

| 2.0 Quarter Credits

This course presents additional didactic information as well as hands-on activities in a supervised laboratory environment. Understanding and skills will be developed by the student to achieve a Level II competency in this NDT area. Logbooks are maintained to track the cumulative training and will reflect the didactic and hands on experience. (12 Didactic Hours, 48 Lab Hours)

NDT105H Penetrant Theory and Application II

| 2.0 Quarter Credits

This course presents additional didactic information as well as hands-on activities in a supervised laboratory environment. Understanding and skills will be developed by the student to achieve a Level II competency in this NDT area. Logbooks are maintained to track the cumulative training and will reflect the didactic and hands on experience. (12 Didactic Hours, 48 Lab Hours)

NDT106H Eddy Current Theory and Application II

| 9.0 Quarter Credits

This course presents additional didactic information as well as hands-on activities in a supervised laboratory environment. Understanding and skills will be developed by the student to achieve a Level II competency in this NDT area. Logbooks are maintained to track the cumulative training and will reflect the didactic and hands on experience. (38 Didactic Hours, 82 Lab Hours)

NDT107H Magnetic Particle Theory and Application I

| 5.0 Quarter Credits

This course explains the theory of magnetic particle inspection and incorporates the didactic information required to achieve a Level I certification in this program. The equipment used will be presented, explained and demonstrated. Upon completion the student will have gained an understanding of the theory employed in Magnetic Particle NDT. (20 Didactic Hours, 70 Lab Hours)

NDT108H Magnetic Particle Theory and Application II

| 5.0 Quarter Credits

This course presents additional didactic information as well as hands-on activities in a supervised laboratory environment. Understanding and skills will be developed by the student to achieve a Level II competency in this NDT area. Logbooks are maintained to track the cumulative training and will reflect the didactic and hands on experience. (20 Didactic Hours, 70 Lab Hours)

NDT109H Ultrasound Theory and Application I

| 3.0 Quarter Credits

This course explains the theory of ultrasound inspection and incorporates the didactic information required to achieve a level I Certification in this program. The equipment used will be presented, explained and demonstrated. Upon completion the student will have gained an understanding of the theory employed in Ultrasound NDT. (10 Didactic Hours, 50 Lab Hours)

NDT110H Radiography Theory I

| 3.0 Quarter Credits

This course explains the theory of radiography inspection and incorporates the didactic information required to achieve a Level I certification in this program. The equipment used will be presented and explained. Upon completion the student will have gained an understanding of the theory employed in Radiography NDT. (10 Didactic Hours, 50 Lab Hours)

49 COURSE DESCRIPTIONS

NDT111H Ultra Sound Theory and

Application II | 10.0 Quarter Credits

This course presents additional didactic information as well as hands-on activities in a supervised laboratory environment. Understanding and skills will be developed by the student to achieve a Level II competency in this NDT area. Logbooks are maintained to track the cumulative training and will reflect the didactic and hands on experience. (35 Didactic Hours, 145 Lab Hours)

None of the above courses require completion of previous college courses. The courses have no prerequisites.

50 COURSE DESCRIPTIONS

General Education Courses

GE110-3 Intermediate Algebra | 4.0 Quarter Credits
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. (40 Didactic Hours, 0 Lab Hours)

GE111-3 English Composition | 4.0 Quarter Credits
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. (40 Didactic Hours, 0 Lab Hours)

GE112-3 Public Speaking | 4.0 Quarter Credits
This course provides the student with a basic understanding of public speaking and how to prepare and present a variety of speeches. This course will enhance the student's communication skills particularly in a business setting. (40 Didactic Hours, 0 Lab Hours)

GE113-3 Introduction to Sociology
| 4.0 Quarter Credits
This course explores sociological processes that underlie everyday life. The course focuses on globalization, cultural diversity, critical thinking, new technology and the growing influence of mass media. (40 Didactic Hours, 0 Lab Hours)

GE114-3 Environmental Science
| 4.0 Quarter Credits
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. (40 Didactic Hours, 0 Lab Hours)

GE115-3 Organizational Behavior
| 4.0 Quarter Credits
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 business settings. (40 Didactic Hours, 0 Lab Hours)

None of the above courses require completion of previous college courses. The courses have no prerequisites.

Management

John Willis, Campus President

M.S., Education and Human Resource Development, Texas A&M University. M.A., Communication, Stephen F. Austin State University. B.A., Radio/Television, Stephen F. Austin State University. Over 20 years of experience in post-secondary education holding leadership positions in academic affairs, admissions, student affairs, campus director and campus president.

Gail Branch, Director of Career and Student Services

Twenty years' experience in staffing and business development in the industrial and skilled trades at management level.

Titus Hubbard, Director of Education

B.S., Aeronautics, Embry-Riddle Aeronautical University. A.A.S., Aeronautics, Embry-Riddle Aeronautical University. FAA Airframe and Powerplant Technician Certificate. U.S. Army helicopter technical inspector, maintenance supervisor. Four years' experience aviation maintenance.

Jerome Feery, Assistant Director of Education

A.A.S. Aviation Maintenance, Eastern New Mexico University. Employed in the commercial aviation industry as a mechanic, inspector or department director for more than forty years.

Peter Kostiuk, VP of Finance and Strategic Operations

M.B.A., University of Chicago. B.A. Economics, Vanderbilt University. CFA Charterholder. Over seven years of financial, strategic, and operational analysis experience related to the security, defense, consumer, and education industries. *[office at Main campus, Canton]*

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. *[office at Main campus, Canton]*

Chad Rogers, Director of Admissions

Employed with MIAT since 2011 as a key member of the Admissions team (both campus and high school). Promoted in 2018 to Director of Admissions. Licensed Texas mortgage broker for eight years.

Richard A. Whiteside, Director of Special Projects

B.A.S. Airframe and Powerplant Technology, Siena Heights University, A.A.S. Aviation Maintenance Technology, Eastern New Mexico University, Diploma, Airframe and Powerplant Technician, Detroit Institute of Aeronautics. FAA Airframe and Powerplant Certificate, Inspection Authorization. FAA Designated Mechanic Examiner. Over twelve years of large, transport category aircraft airframe repair and modification. Specialty in all phases of aircraft sheet-metal work. Over sixteen years of experience in the field of career education.

Shannon Wilson, Human Resources Coordinator

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. *[office at Main campus, Canton]*

Benjamin Yager, Assistant Director of Financial Aid

B.A., Music, focus on Music Education, Michigan State University. Member of Michigan Student Financial Aid Association and Texas Association of Student Financial Aid Administrators. Financial aid training from numerous seminars, conferences and workshops.

Faculty

Jimenez Bailey

B.A. Christian Education, Regent University. A.A. Communication, Antelope Valley College Association. Seasoned management professional with skills acquired from U.S. Army and corporate management, including seven years in aircraft maintenance management.

Lester Berkheiser

A.S. Business Management, Houston Community College. FAA Airframe and Powerplant License. FAA Inspection Authorization. Commercial Pilot's License Instrument, Single, and Multi-Engine Ratings. Sai Global Auditor Training. Over twenty-five years' experience in the aviation industry as a mechanic and/or inspector at Part 135 and Part 145 repair stations.

Chester Bolden, II

A.A.S. Business Administration, Colorado Technical University. Certified Pipe Welder. CPR, Hazard Materials, Overhead Crane. TIG (HELIARC) welding expert. ISO Certified. Eighteen years of experience as a Welder Fabricator for GE Energy.

James Dyba, Sr.

FAA Airframe and Powerplant License. FAA Inspection Authorization. Over twenty-five years of combined experience military and civilian, with a comprehensive background in maintenance on various aircraft airframes and powerplants.

Christopher Edwards

A.A.S., AAS Process Technology, San Jacinto College. Ten years' experience in all aspects of process refinery with in-depth knowledge of wet chemistry and titration methods.

Mark Ferguson

B.S. Geology, University of Houston. FAA Airframe and Powerplant License. U.S. Army veteran helicopter mechanic. Experienced in non-destructive testing, health, safety, and environmental, quality control, data collection and data analysis. Five years' experience as a civilian aircraft mechanic. Four years' hydrologic technician experience.

Randy Hand

Nearly twenty years of experience as an FAA repair technician on aircraft interior components and with serviceable military asset reclamation (F100-PW-100/200).

Burrell Haselrig

A.O.S. Aviation Maintenance Technology, Spartan College of Aeronautics and Technology. Certificate, Westwood College of Aviation Technical. FAA Airframe and Powerplant License. Over ten years' experience in aviation industry as hangar and ramp support, quality inspector, airframe and powerplant technician, and quality assurance inspector. Experienced aviation instructor.

Herbert Hill, III

B.S. Professional Aeronautics, Embry-Riddle Aeronautical University. FAA Airframe and Powerplant License. U.S. Air Force veteran. Extensive experience with 7-level maintenance qualification, aircraft quality assurance, troubleshooting, overhaul, and repair.

Ricky Hines

A.A.S. Aviation Maintenance (minor in Helicopter Specialties), Spartan School of Aviation Maintenance. FAA Airframe and Powerplant Technician Certificate, Inspection Authorization. Twenty-five years' experience in the field of aviation maintenance and an additional sixteen years as an instructor.

Travis Hopkins

A.A.S. Welding Technology, Texas State Technical College. Ten years' experience in educational, commercial, and industrial welding, fitting, fabrication, and construction.

Dennis Jones, Jr.

B.S. Purdue University at Indianapolis. FAA Airframe and Powerplant License. FAA Inspection Authorization. Over fifteen years' experience in aircraft maintenance on B727, B737, B747, B757, B767, A300, A319, A320, DC-6, DC-8, DC-9, DC-10, MD-80, L-1011, L-188, C-130, P-3, EMB 145, CRJ 700/900, PC-12 45/47.

Jerry Joyce

A.A. Johnson County Community College. Wichita State University, Aerospace Engineer. Kansas State University – Professional Pilot, Aviation Safety. Summa Cum Laude graduate from Aviation Institute of Maintenance. FAA Airframe and Powerplant Technician. Experienced maintenance technician in commercial aviation industry. Served in United States Army as an Airborne Paratrooper and the United States Air Force Auxiliary Civil Air Patrol.

Cleve Kellum

B.A., Business Administration and Marketing, Texas Lutheran College. FAA Airframe and Powerplant Mechanic, FAA Flight Engineer, FAA Flight Dispatcher, FAA Private Pilot. Fleet Technical Instructor. Twenty-three years' experience as a C-5 Flight Engineer/Instructor for United States Air Force Reserve.

53 MANAGEMENT, FACULTY AND STAFF

Kenneth LeClair

Certificate – HVAC, Houston Community College. Microsoft Certification, University of Houston-Downtown. Over fifteen years' experience as a technician in information technology, heating and cooling, dental equipment repair and refrigeration maintenance and repair.

Devan Lindsay

B.S. Aeronautics, Embry-Riddle Aeronautical University. A.A.S. Mechanical and Electrical Technology, Community College of the Air Force. EPA Universal certification. Hazardous Area Electrician license. U.S. Air Force veteran, serving six years as Electrical Systems Journeyman. Four years' experience civilian experience as a Field Service Technician maintaining and repairing turbines and supporting components.

Dustin Mitchell

B.S., Psychology, Columbia Southern University. A.A.S. Aircraft Maintenance Technology, Community College of the Air Force. FAA Airframe and Powerplant Technician Certificate. Merchant Marine Credential. Universal HVACR Technician, EPA Certification. Nine years' experience leading aircraft maintenance operations. Ten years' experience repairing helicopters in the US Air Force. Three years' experience in offshore oil drilling industry as a rig mechanic.

G. David Moriconi

A.A.S., Nuclear Powerplant Technology, Excelsior University. Attended NJATC apprenticeship school. Licensed Journeyman Electrician. AHA CPR Instructor, AHA First Aid, OSHA 10, Syntec Certified Fall Protection Instructor and NR10. Over fourteen years of experience including four years in the U.S. Navy as a Machinists Mate Nuclear Engineering Laboratory Technician, six years as an Industrial Controls Electrician and four years as a Commissioning Technician.

Michael Palmisano

Graduated with Honors from San Jacinto College's HVAC program. Over twenty-four years of industry experience working on the installation, maintenance and repair of commercial HVAC equipment. Honorably discharged veteran of the U.S. Army.

Adrian Pujoue

Graduate of Houston Community College and The Ocean Corporation's NDT Training Course. ACCP Level II MT PT and VT; Non-Destructive test inspection level II VT, PT, MT, UTT. Over five years' experience in the field of non-destructive testing holding job titles of Inspector and Sr. Quality Inspector.

Kirk Rheinhardt

B.S. Project Management, ITT Technical Institute. A.S. Computer Electronics Electrical Technology, ITT Technical Institute. Nearly twenty years' industry experience holding positions of Field Support Technician, Composite Technician/Fabricator, HSE Technician/Safety Training Coordinator, and Phase Maintenance Manager/First Line Manager.

Mary Short

A.S. Information Technology, South University. Aviation Maintenance Technician diploma, Louisiana Technical College. FAA Airframe and Powerplant License. Nearly twenty years' experience in removal and replacement of components, engine inspections, component inspection, minor repairs, monthly-hourly-annual inspections for both fixed wing and rotary wing aircraft.

Myron Simon

A.A.S. Aviation, Vaughn College of Aeronautics and Technology. FAA Airframe and Powerplant License. Experienced avionics technician inspecting, maintaining, and calibrating repairs, constructs, and installs. Extensive federal and military experience as engineering technician, electronic integrated systems mechanic, mobile equipment supervisor, avionics technician, propulsion engine technician, motor vehicle operator supervisor, and aviation machinist mate.

Administrative Staff

Admissions

Kenneth Boyd	Senior Admissions Representative
Keiandra England-Webb	Senior Admissions Representative
Brittany Cox	Admissions Representative
Elena Lopez	Admissions Representative
Peter Perez	Admissions Representative
Jason Robertson	High School Admissions Team Leader
Ian Bradley	High School Admissions Representative
Crystal Norman	High School Admissions Representative

Bookkeeping

Stephanie Ramos	Bookkeeper
-----------------	------------

Career and Student Services

Jennifer Kiser	Student Affairs Advisor
----------------	-------------------------

Enrollment - Student Records

Helen Sanchez	Enrollment Coordinator
Mary Socha	Student Records

Financial Aid

Nusly Pac	Sr. Financial Aid Officer and VA Coordinator
Ruben Rios	Financial Aid Officer
Chantel Williams	Financial Aid Officer

Hangar/Shop

Juan Gonzales	Hangar Manager
---------------	----------------

Learning Resource Center (LRC)

Lorilei Gonzales	LRC Coordinator
------------------	-----------------

Reception

Marisa Smith	Receptionist
Daniela Perales	Receptionist

Michigan Institute of Aeronautics, Inc. Board of Directors

Victor Maruri
Carlos Signoret
Gail O. Myers
Jennifer M. Paugh
John Willis

MIAT Academic Calendar
(All Programs)

12.05.2019 (R.4)

2020

Quarter

January							February							March						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1 H	2 B	3	4							1	1	2 Q1A	3	4	5	6	7
5	6	7	8	9	10	11	2	3	4	5	6	7	8	8	9	10	11	12	13	14
12	13	14	15	16	17	18	9	10	11	12	13	14	15	15	16	17	18	19	20	21
19	20 H	21	22	23	24	25	16	17	18	19	20	21	22	22	23	24	25	26	27	28
26	27	28 Q6B	29	30	31		23	24	25	26	27	28	29	29	30	31				
April							May							June						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1 Q1B	2	3	4						1	2		1	2	3	4	5	6
5	6	7	8	9	10	11	3	4 Q2A	5	6	7	8	9	7	8 Q2B	9	10	11	12	13
12	13	14	15	16	17	18	10	11	12	13	14	15	16	14	15	16	17	18	19	20
19	20	21	22	23	24	25	17	18	19	20	21	22	23	21	22	23	24	25	26	27
26	27	28	29	30			24 31	25 H	26	27	28	29	30	28	29 B	30 B				
July							August							September						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
			1 B	2 B	3 H	4							1			1	2	3	4	5
5	6	7	8	9	10	11	2	3	4	5	6	7	8	6	7 H	8	9	10	11	12
12	13	14	15	16 Q3A	17	18	9	10	11	12	13	14	15	13	14	15	16	17	18	19
19	20	21	22	23	24	25	16	17	18	19 Q3B	20	21	22	20	21	22	23 Q4A	24	25	26
26	27	28	29	30	31		23 30	24 31	25	26	27	28	29	27	28	29	30			
October							November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7			1	2 Q5A	3	4	5
4	5	6	7	8	9	10	8	9	10	11 H	12 B	13	14	6	7	8	9	10	11	12
11	12	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19
18	19	20	21	22	23	24	22	23	24	25	26 H	27 H	28	20	21	22	23	24 H	25 H	26
25	26 Q4B	27	28	29	30	31	29	30						27	28 B	29 B	30 B	31 B		

Acceptance or Denial	5
Accreditation and Approvals	2
Academic Calendar	55
Academic/Financial Aid Probation	17
Academic/Financial Aid Warning	16
Academic Policies	15-24
ACCSC School of Distinction	ii
Addenda and Supplements to the Catalog	4
Administrative Staff	54
Admission of Disabled Students	6
Admission Requirements: Diploma Programs	4
Admission Requirements: Associate Degree Programs	4
Advanced Welding Technology Diploma Program	33
Advising and Community Resources	9
Age Requirements	6
Airframe and Powerplant Technician Diploma Program	27
Alumni Retraining	8
Application Process	4
Attendance Taking Procedures	21
Auditing a Course	18
Aviation Maintenance Technology-AAS	25
Background Self Disclosure/Evaluation	5
Campus Administration	ii
Campus Locations	2
Career and Student Services	8-9
Class Attendance and Absence Policy	21
Class Availability	17
Class Size	17
Clock Hour – Defined	19
Change of Content	ii
Code of Conduct (HOEA)	10
Commencement Ceremony	9
Comparable Credit	7
Comprehensive Student Complaint and Dispute Resolution System	23
Conditional Enrollment	5
Consumer Information	ii
Cost of Education	14
Course Descriptions	36-50
Course Repetitions	18
Credits Accepted by MIAT	7
Demonstration of English Proficiency	5
Distance Education	18
Early Departure from Class	21
Early FAA Oral and Practical Examinations	19
Energy Technology-AAS	29
Entrance Evaluation in Lieu of Documentation	4

FAA Certification	19
Facilities and Equipment	3
Faculty	52-53
Federal Direct Plus Loan	10
Federal Pell Grant	10
Federal Subsidized Direct Loan	10
Federal Unsubsidized Direct Loan	10
Final Grade Appeals	15
Financial Aid	10-14
Grade Point Average Calculations	15
Grading System	15
Graduate Employment Assistance	8
Graduation Requirements	21
History	1
Housing Referral Program	9
HVACR Technician Diploma Program	32
Incomplete Coursework	18
Index	56
Industrial Maintenance Technician	30
Learning Resource System	9
Leave of Absence	22
Make Up Time – FAA Certificated Programs	21
Management	51
Memberships and Other Affiliations	2
New Student Orientation	7
Non-Destructive Testing Advanced Technician	35
Non-Destructive Testing Technician	35
Notice of Non-Discrimination	4
Online Catalog	ii
Online Course Requirements	5
Other Financial Aid Programs	10
Ownership	2
Pace of Completion	16
Personal Property	4
Philosophy and Objectives	1
Post Withdrawal Disbursement	14
Program Advisory Committees	3
Programs of Study	25-35
Privacy of Student Records (FERPA)	19
Professional Conduct and Appearance	22
Questions, Concerns or Complaints	4
Re-establishing Eligibility	17
Refund Policies	11
Return of Federal Title IV Funds	1
Return of Non-Title IV Funds	13
Satisfactory Academic Progress Appeal	17
Satisfactory Academic Progress Policies	15

Scholarship Programs	10
School Closings	19
School Hours	18
Shielded Metal Arc Welding Diploma Program	34
Student Complaint/Grievance Procedure	24
Student Employment Assistance	8
Student Handbook	9
Table of Contents	iii
Tardiness Policy	21
Third Party Exam Fees	11
Transferability of Credit to Other Institutions	7
Transfer and Comparable Credit Policy	6
Transfer Credit	6
Tuition, Books, Tools, and Supplies	11
Tutoring	9
Types of Financial Aid	10
Vaccine Policy	6
Veteran Benefits	10
Weapons, Explosives, Similar Devices	4
Welcome Letter from Campus President	I
Welding Technology Diploma Program	33
Wind Power Technician Diploma Program	31
Withdrawals	13, 22

Certification

I hereby certify that the information contained in this catalog, dated **November 18, 2019** is true and correct to the best of my knowledge.



John Willis, Campus President