

Undergraduate Certificate in Aviation Maintenance Technology, Airframe

The Undergraduate Certificate in Aviation Maintenance Technology (AMT), Airframe, is designed to prepare graduates for employment as maintenance technicians in general aviation, corporate aviation, airlines or aerospace manufacturers. In addition to traditional aircraft maintenance courses, the curriculum emphasizes modern aircraft systems.

Admission Requirements

- Complete the Admission Requirements for Undergraduate Certificate Programs (<http://catalog.uaa.alaska.edu/academicpoliciesprocesses/admissions/undergraduate/>).
- Apply for admission to the AMT Airframe program by contacting the Aviation Technology Division (ATD) at 2811 Merrill Field Drive in Anchorage, calling (907) 786-7200 or visiting www.uaa.alaska.edu/aviation (<http://www.uaa.alaska.edu/aviation/>).
- Present evidence of a proficiency in mathematics at or exceeding the MATH A055 level. An appropriate score on a math placement test may be used.
- Demonstrate English language proficiency through placement into WRTG A110 (or higher), ACT English scores, SAT Critical Reading scores or an appropriate score on the UAA-approved English placement exam. Generally, applicants eligible for entry into WRTG A110 have sufficient proficiency for entry into the AMT program.

Advising

All students must meet with an ATD academic advisor prior to beginning any program of study and are encouraged to meet each semester for the purpose of reviewing their academic progress and planning future courses. It is particularly important for students to meet with their advisor whenever academic difficulties arise. Degree check sheets are available in the ATD office. See the ATD advisor for appropriate sequence of courses.

Successful progress through the AMT program requires that all students have algebra proficiency at the MATH A055 level (MATH A105 is highly recommended) and English proficiency at the WRTG A110 level. Preparatory mathematics and English courses should be taken prior to entry into the AMT program. Under certain circumstances mathematics and English courses may be taken during the first semester with some AMT courses; see an advisor before registering. The AMT program courses are sequential and students are cautioned that taking courses out of sequence will extend the program beyond its normal length. Typically, AMT courses have prerequisites, and advisor approval is required prior to registration for all AMT courses.

Graduation Requirements

- Complete the General University Requirements for Undergraduate Certificates (<http://catalog.uaa.alaska.edu/undergraduateprograms/certificaterequirements/>).
- Complete the following major requirements:

Code	Title	Credits
AMT A170	Aircraft Ground Operations and Safety	1
AMT A171	Basic Aerodynamics	3
AMT A172	Aircraft Publications, Regulations, and Records	3
AMT A174 & A174L	Fundamentals of Aircraft Electronics and Fundamentals of Aircraft Electronics Lab	5
AMT A175	Drawing and Precision Measurement	2
AMT A176	Aircraft Materials and Processes I	2
AMT A181 & A181L	Aircraft Fuel Systems and Aircraft Fuel Systems Lab	4
AMT A185 & A185L	Aircraft Sheetmetal Structures and Aircraft Sheetmetal Structures Lab	5
AMT A186	Aircraft Non-Destructive Inspection Methods	3
AMT A272	Aircraft Electrical Hardware and Systems	3
AMT A273 & A273L	Aircraft Fluid Power Systems and Aircraft Fluid Power Systems Lab	4
AMT A274 & A274L	Aircraft Electronic Systems and Aircraft Electronic Systems Lab	6
AMT A283 & A283L	Aircraft Auxiliary Systems and Aircraft Auxiliary Systems Lab	4
AMT A285 & A285L	Aircraft Bonded Structures and Aircraft Bonded Structures Lab	5
AMT A286	Aircraft Materials and Processes II	2
AMT A364	Aircraft Avionics Systems	3
AMT A369 & A369L	Airframe Assembly and Inspections and Airframe Assembly and Inspections Lab	5
Total		60

A total of 60 credits is required for the certificate.

Licensure and/or Certification

Graduates of the Undergraduate Certificate in Aviation Maintenance Technology, Airframe are eligible to sit for the Federal Aviation Administration (FAA) national certification examination(s).

Please go to UAA's Authorization by State (<https://www.uaa.alaska.edu/academics/office-of-academic-affairs/uaa-state-authorization/authorization.cshhtml/>) website for information about licensure or certification in a state other than Alaska.

Program Student Learning Outcomes

At the completion of this program, students will be able to:

- Demonstrate proficient, entry-level aviation maintenance skills.
- Demonstrate proficiency in airframe maintenance skills.
- Demonstrate knowledge of aircraft structures and systems, and appropriate FAA regulations.
- Demonstrate knowledge of industry information: current status, segments and opportunities.

Sample Plan

The academic plan below is one pathway through the degree/certificate. It includes all requirements, taking into account recommendations from program faculty. Each student's plan may vary according to their initial course placement (<http://catalog.uaa.alaska.edu/academicpoliciesprocesses/academicstandardsregulations/courseplacement/>), intended course load, additional majors and/or minors, and their placement into required prerequisite courses. Any change in the plan below can have an unforeseen impact on the rest of the plan. **Therefore, it is very important to meet with your academic advisor to verify your personal academic plan.**

Please review the following terms, definitions, and resources associated with the sample academic plan below.

- Each course in the far left column links to a pop-up bubble with a course description, prerequisite requirements, and associations with university requirements. For example, if a course fulfills a general education requirement, you will see that in the pop-up bubble.
- **GER:** indicates a General Education Requirement (<http://catalog.uaa.alaska.edu/undergraduateprograms/baccalaureaterequirements/gers/>). GERs that also count toward degree/certificate requirements appear as a specific course in the plan. For these courses, "GER" is not indicated explicitly in the table, but if you click on the course, you will see the course's GER status in the pop-up bubble.
- **Program Elective:** indicates a specific course selection determined by program faculty to fulfill a degree/certificate requirement. Students should seek assistance from their academic advisor.
- **Elective:** indicates an open selection of 100-400 level university courses to fulfill elective credits needed to meet the minimum total credits toward the degree/certificate.
- **Upper Division Program Elective:** indicates a specific 300-400 level course selection determined by the program faculty to fulfill a

degree/certificate requirement. Students should seek assistance from their academic advisor.

- **Upper Division Elective:** indicates an open selection of 300-400 level courses to fulfill elective credits needed to meet the minimum total credits toward the degree/certificate. These courses must be upper division in order to meet General University Requirements for the particular degree/certificate type.

Course	Title	Credits
First Year		
Fall		
Sample Plan begins First Year Spring semester		
	Credits	0
Spring		
AMT A170	Aircraft Ground Operations and Safety	1
AMT A171	Basic Aerodynamics	3
AMT A172	Aircraft Publications, Regulations, and Records	3
AMT A174	Fundamentals of Aircraft Electronics	3
AMT A174L	Fundamentals of Aircraft Electronics Lab	2
AMT A175	Drawing and Precision Measurement	2
AMT A176	Aircraft Materials and Processes I	2
	Credits	16
Second Year		
Fall		
AMT A272	Aircraft Electrical Hardware and Systems	3
AMT A273	Aircraft Fluid Power Systems	2
AMT A273L	Aircraft Fluid Power Systems Lab	2
AMT A274	Aircraft Electronic Systems	5
AMT A274L	Aircraft Electronic Systems Lab	1
	Credits	13
Spring		
AMT A181	Aircraft Fuel Systems	3
AMT A181L	Aircraft Fuel Systems Lab	1
AMT A185	Aircraft Sheetmetal Structures	3
AMT A185L	Aircraft Sheetmetal Structures Lab	2
AMT A186	Aircraft Non-Destructive Inspection Methods	3
	Credits	12
Third Year		
Fall		
AMT A283	Aircraft Auxiliary Systems	3
AMT A283L	Aircraft Auxiliary Systems Lab	1
AMT A285	Aircraft Bonded Structures	4
AMT A285L	Aircraft Bonded Structures Lab	1
AMT A286	Aircraft Materials and Processes II	2
AMT A364	Aircraft Avionics Systems	3
AMT A369	Airframe Assembly and Inspections	3

AMT A369L	Airframe Assembly and Inspections Lab	2
Credits		19
Total Credits		60