Undergraduate Certificate in Aviation Maintenance Technology, Powerplant

The Undergraduate Certificate in Aviation Maintenance Technology (AMT), Powerplant, 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 Powerplant 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 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 a higher level with an appropriate level on ACT English scores, SAT Verbal scores, or an English placement exam. Generally, applicants eligible for entry into WRTG A110 level have sufficient proficiency for entry into the AMT programs.

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 and schedules. 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 and English proficiency. Preparatory mathematics and English courses should be taken prior to entry into the AMT program. Under certain circumstances preparatory courses may be taken during the first semester with some AMT courses. The AMT program courses are sequential and the student is 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:

Program Requirements

The courses listed below are scheduled in established blocks to meet course prerequisites. Mixing courses from a different semester series may result in significantly extending the completion of the certificate, as most courses are offered once a year.

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 A177	Reciprocating Engine Theory	2
AMT A178	Turbine Engine Theory	2
AMT A181 & A181L	Aircraft Fuel Systems and Aircraft Fuel Systems Lab	4
AMT A186	Aircraft Non-Destructive Inspection Methods	3
AMT A187 & A187L	Aircraft Reciprocating Engine Overhaul and Aircraft Reciprocating Engine Overhaul Lab	5
AMT A272	Aircraft Electrical Hardware and Systems	3
AMT A274 & A274L	Aircraft Electronic Systems and Aircraft Electronic Systems Lab	6
AMT A279 & A279L	Aircraft Turbine Engine Repair and Overhaul and Aircraft Turbine Engine Repair and Overhaul Lab	4
AMT A282	Aircraft Propeller Systems	1
AMT A284 & A284L	Aircraft Electrical Machinery and Aircraft Electrical Machinery Lab	4
AMT A287 & A287L	Reciprocating Engine Installation and Operation and Reciprocating Engine Installation and Operation Lab	5

AMT A289 & A289L	Turbine Engine Installation and Operation and Turbine Engine Installation and Operation 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, Powerplant 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.cshtml/) website for information about licensure or certification in a state other than Alaska.

Program Student Learning Outcomes

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

- Demonstrate proficiency in entry-level aviation maintenance skills.
- Demonstrate proficiency in the required powerplant maintenance skills.
- Demonstrate knowledge of aircraft powerplants, systems and appropriate FAA regulations.
- Demonstrate knowledge of industry information: current status, trends, segments and opportunities.