

# 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

- Satisfy the Application and 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) (<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

- Satisfy the General University Requirements for Undergraduate Certificates (<http://catalog.uaa.alaska.edu/undergraduateprograms/certificaterequirements/>).
- Complete the Program Requirements below.

## 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<br>& A289L | Turbine Engine Installation and<br>Operation<br>and Turbine Engine Installation<br>and Operation Lab | 5         |
| <b>Total</b>        |  | <b>60</b> |

A total of 60 credits is required for the AMT Powerplant Undergraduate 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/provost\\_office/uaa-state-authorization/authorization.cshtml/](https://www.uaa.alaska.edu/academics/office-of-academic-affairs/provost_office/uaa-state-authorization/authorization.cshtml/)) website for information about licensure or certification in a state other than Alaska.