

AVIATION MAINTENANCE TECHNOLOGY

www.pcc.edu/amt

CAREER AND PROGRAM DESCRIPTION

An aircraft mechanic certificated under Part 65 of the Federal Aviation Regulations may maintain or alter aircraft within limitations specified by the regulations. The certificate also permits the holder to supervise other people in maintaining aircraft and to approve work for return to service. In addition, the certificated mechanic may perform 100-hour inspections. After performing 100-hour inspections or maintenance, the mechanic must certify airworthiness (or approval for return to service) in a signed entry in the appropriate aircraft record.

The certificated AMT mechanic is considered to be a general practitioner at keeping aircraft in safe condition and may also decide to specialize in: hydraulics, pneumatics, rigging, inspection, bonded repair, corrosion control, sheet metal repair, electrical systems, avionics installation, propeller service, welding, painting, record keeping or engine service.

The Aviation Maintenance Technology Program is approved by the State Division of Vocational Education, the Veterans Administration and the Federal Aviation Administration and is offered in a recommended sequence of 24 courses, most of which are 18-day modules. However, flexibility in program design does allow some variation in sequence. Any variation must be approved by the department representative.

DEGREES AND CERTIFICATES OFFERED

ASSOCIATE OF APPLIED SCIENCE DEGREE

Aviation Maintenance Technology

TWO-YEAR CERTIFICATE

Aviation Maintenance Technology

ONE-YEAR CERTIFICATE

Aviation Maintenance Technology: Airframe

Aviation Maintenance Technology: Powerplant

Academic Prerequisites

For all AMT Certificates and AAS degree:

- Completion of AMT 101
- Placement into IRW 90 or (RD 90 or higher)
- Placement into IRW 90 or (WR 90 or higher)
- Completion of MTH 58 or MTH 60 at PCC or, if a student places into a higher than a math 60 class at PCC, they must take the (free) AMT department math test. AMT Department Chair permission is required to take the AMT department math test.

Academic Requirements

The program is divided into the following three areas of study:

- General Subject Areas: These courses, contain requirements which are common to both airframe and powerplant ratings. AMT 102, AMT 105, AMT 106, AMT 107, AMT 108, AMT 203 and AMT 204 are required prior to entry into the airframe and powerplant subject areas.
- Airframe Subject Areas: Students who have completed all of the courses in the airframe and general subject areas, plus WLD 210, may receive a certificate of completion which qualifies them to take FAA tests for an Aviation Mechanic Certificate with the Airframe rating.
- Powerplant Subject Areas: Students who have completed all of the courses in the powerplant and general subject areas may receive a certificate of completion which qualifies them to take

FAA tests for an Aviation Mechanic Certificate with the Powerplant rating.

Non-Academic Prerequisites

- None

Non-Academic Requirements

- None

AVIATION MAINTENANCE TECHNOLOGY AAS DEGREE

Minimum 104 credits. Students must also meet Associate Degree Comprehensive Requirements and Associate of Applied Science Requirements. Students must complete a total of four courses of General Education. Math/computation competency is met through the courses in the program of study indicated with a § symbol. Students should consult with program advisors for course planning.

Course of Study

The coursework listed below is required. The following is an example of a term-by-term breakdown.

		Credits
First Term		
AMT 105	Aviation CFRs and Related Subjects	4
AMT 106	Aircraft Applied Science §	4
AMT 107	Materials & Processes §	4
General Education: 1 course		
Second Term		
AMT 102	Aircraft Electricity I §	4
AMT 108	AMT Practicum/General	2
AMT 203	Aircraft Electricity II §	4
AMT 204	Aircraft Electricity III	4
Third Term		
AMT 109	Assembly & Rigging	4
AMT 208	Aircraft Systems §	4
AMT 211	Composite Structures	4
General Education: 1 course		
Fourth Term		
AMT 212	Sheet Metal §	4
AMT 213	Hydraulics, Pneumatics and Landing Gear §	4
WLD 210	Aviation Welding	2
Fifth Term		
AMT 115	Aircraft Structures & Inspection §	4
AMT 117	Reciprocating Engine Theory & Maintenance	4
AMT 214	Instruments, Communication & Navigation Systems	4
AMT 216	AMT Practicum/Airframe	2
Sixth Term		
AMT 121	Turbine Engine Theory and Maintenance	4
AMT 219	Turbine Engine Overhaul	4
AMT 222	Reciprocating Engine Overhaul	4
General Education: 1 course		
Seventh Term		
AMT 120	Propellers and Engine Installation §	4
AMT 123	Ignition Systems	4
AMT 124	Fuel Metering Systems	4
General Education: 1 course		
Eighth Term		
AMT 218	Powerplant Inspection	4

AMT 225	AMT Practicum/ Powerplant	2
Total Credits		104

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Course cannot be substituted for another course.

TWO-YEAR CERTIFICATE

Aviation Maintenance Technology (p. 2)

ONE-YEAR CERTIFICATE

Aviation Maintenance Technology: Airframe (p. 2)
Aviation Maintenance Technology: Powerplant (p. 2)

AVIATION MAINTENANCE TECHNOLOGY TWO-YEAR CERTIFICATE

Minimum 92 credits. Students must meet all certificate requirements.

Course of Study

The coursework listed below is required. The following is an example of a term-by-term breakdown.

First Term		Credits
AMT 105	Aviation CFRs and Related Subjects §	4
AMT 106	Aircraft Applied Science §	4
AMT 107	Materials & Processes §	4
Second Term		
AMT 102	Aircraft Electricity I	4
AMT 108	AMT Practicum/General	2
AMT 203	Aircraft Electricity II §	4
AMT 204	Aircraft Electricity III §	4
Third Term		
AMT 109	Assembly & Rigging	4
AMT 208	Aircraft Systems §	4
AMT 211	Composite Structures	4
Fourth Term		
AMT 212	Sheet Metal §	4
AMT 213	Hydraulics, Pneumatics and Landing Gear §	4
WLD 210	Aviation Welding	2
Fifth Term		
AMT 115	Aircraft Structures & Inspection §	4
AMT 117	Reciprocating Engine Theory & Maintenance §	4
AMT 214	Instruments, Communication & Navigation Systems	4
AMT 216	AMT Practicum/Airframe	2
Sixth Term		
AMT 121	Turbine Engine Theory and Maintenance §	4
AMT 218	Powerplant Inspection	4
AMT 222	Reciprocating Engine Overhaul	4
Seventh Term		
AMT 120	Propellers and Engine Installation §	4
AMT 123	Ignition Systems	4
AMT 124	Fuel Metering Systems	4
Eighth Term		
AMT 219	Turbine Engine Overhaul	4
AMT 225	AMT Practicum/ Powerplant	2
Total Credits		92

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Course contains Related Instruction and cannot be substituted with another course; Related Instruction details can be viewed here.

AVIATION MAINTENANCE TECHNOLOGY: AIRFRAME ONE-YEAR CERTIFICATE

Minimum 58 credits. Students must meet all certificate requirements.

Course of Study

The coursework listed below is required. The following is an example of a term-by-term breakdown.

First Term		Credits
AMT 105	Aviation CFRs and Related Subjects §	4
AMT 106	Aircraft Applied Science §	4
AMT 107	Materials & Processes §	4
Second Term		
AMT 102	Aircraft Electricity I §	4
AMT 108	AMT Practicum/General	2
AMT 203	Aircraft Electricity II §	4
AMT 204	Aircraft Electricity III §	4
Third Term		
AMT 109	Assembly & Rigging	4
AMT 208	Aircraft Systems §	4
AMT 211	Composite Structures	4
Fourth Term		
AMT 212	Sheet Metal §	4
AMT 213	Hydraulics, Pneumatics and Landing Gear §	4
WLD 210	Aviation Welding	2
Fifth Term		
AMT 115	Aircraft Structures & Inspection §	4
AMT 214	Instruments, Communication & Navigation Systems	4
AMT 216	AMT Practicum/Airframe	2
Total Credits		58

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Course contains Related Instruction and cannot be substituted with another course; Related Instruction details can be viewed here.

AVIATION MAINTENANCE TECHNOLOGY: POWERPLANT ONE-YEAR CERTIFICATE

Minimum 60 credits. Students must meet all certificate requirements.

Course of Study

The coursework listed below is required. The following is an example of a term-by-term breakdown.

First Term		Credits
AMT 105	Aviation CFRs and Related Subjects §	4
AMT 106	Aircraft Applied Science §	4
AMT 107	Materials & Processes §	4
Second Term		
AMT 102	Aircraft Electricity I §	4
AMT 108	AMT Practicum/General	2
AMT 203	Aircraft Electricity II §	4
AMT 204	Aircraft Electricity III §	4
Third Term		
AMT 121	§ Turbine Engine Theory and Maintenance	4

AMT 123	Ignition Systems	4
AMT 219	Turbine Engine Overhaul	4
Fourth Term		
AMT 117	Reciprocating Engine Theory & Maintenance §	4
AMT 120	Propellers and Engine Installation §	4
AMT 124	Fuel Metering Systems	4
Fifth Term		
AMT 218	Powerplant Inspection	4
AMT 222	Reciprocating Engine Overhaul	4
AMT 225	AMT Practicum/ Powerplant	2
Total Credits		60

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Course contains Related Instruction and cannot be substituted with another course; Related Instruction details can be viewed here.