

# Powerplant Certificate

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## Minimum Requirements for Powerplant Certificate: 40 credits

Students must earn a C- or better in each course.

Code	Title	Credits
<b>General University Requirements</b>		
Complete the general university requirements. ( <a href="https://catalog.uaf.edu/certificates/#gurcertificatetext">https://catalog.uaf.edu/certificates/#gurcertificatetext</a> )		
<b>Certificate Requirements</b>		
Complete the certificate requirements. ( <a href="https://catalog.uaf.edu/certificates/#certificaterequirementstext">https://catalog.uaf.edu/certificates/#certificaterequirementstext</a> ) <sup>1</sup>		
<b>Powerplant Program Requirements</b>		
<i>General FAA Subjects</i>		
Complete the following:		
AFPM F165	Mathematics for AMTs	0.5
AFPM F166	Fundamentals of Electricity and Electronics	3.5
AFPM F167	Physics for AMTs	1
AFPM F168	Aircraft Technical Drawings	0.5
AFPM F169	Fluid Lines and Fittings	0.5
AFPM F170	Aircraft Materials, Hardware and Processes	4.5
AFPM F171	Cleaning and Corrosion Control	1
AFPM F172	Federal Aviation Regulations and Publications	2.5
AFPM F173	Weight and Balance	1.5
AFPM F174	Ground Operations and Servicing	1.5
<i>Powerplant Subjects</i>		
Complete the following:		
AFPM F236	Aircraft Electrical Systems	4
AFPM F238	Aircraft Fire Protection Systems	0.5
AFPM F239	Aircraft Instrument Systems	1.5
AFPM F242	Aircraft Reciprocating Engines	6
AFPM F247	Turbine Engines	4
AFPM F269	Ignition and Starting Systems	2
AFPM F274	Engine Fuel Metering Systems	3
AFPM F276	Propellers	0.5
AFPM F289	Engine Inspection	1
AFPM F291	Powerplant Testing	0.5
<b>Total Credits</b>		<b>40</b>

<sup>1</sup> As part of the certificate requirements, the communication, computation and human relations content is embedded in the major required courses for this program.

**Note:** This is a one-year program, usually starting at the beginning of September. Entry at other times is allowed only with departmental approval. A personal background check and drug test will be required prior to

acceptance into the airframe and powerplant, airframe or powerplant certificate programs.

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Learning Outcomes are measurable statements that describe knowledge or skills achieved by students upon completion of the program.

Students graduating from this program will be able to:

- Possess the skills and knowledge to become highly competitive candidates for job openings and promotions in repairing and maintaining powerplants
- Possess the skills and knowledge expected of professionals in the aviation industry
- Possess writing, oral communication and computation skills and an understanding of human relations skills sufficient for employment in the aviation maintenance industry