

CERTIFICATE, AIRFRAME AND POWERPLANT

Minimum Requirements for Airframe and Powerplant Certificate: 49 credits

Code	Title	Credits
General University Requirements		
Complete the general university requirements. (https://catalog.uaf.edu/archives/2020-2021/certificates-associate/)		
Certificate Requirements		
Complete the certificate requirements. (https://catalog.uaf.edu/archives/2020-2021/certificates-associate/summary-of-certificate-and-associate-degree-requirements/#certificatestext) ¹		
Airframe and Powerplant Program Requirements		
AFPM F145	Basic Mathematics	1
AFPM F146	Basic Electricity	2
AFPM F147	Physics for Mechanics	0.5
AFPM F148	Aircraft Drawing	1
AFPM F149	Fluid Lines and Fittings	0.5
AFPM F150	Materials and Processes	2
AFPM F151	Cleaning and Corrosion Control	1
AFPM F152	Federal Aviation Regulations	1
AFPM F153	Weight and Balance	1
AFPM F154	Ground Operations and Servicing	0.5
Airframe Structures Requirements		
AFPM F261	Nonmetallic Structures	1
AFPM F262	Aircraft Coverings	1
AFPM F263	Aircraft Finishes	0.5
AFPM F264	Sheet Metal Structures	3
AFPM F265	Aircraft Welding	1.5
AFPM F266	Assembly and Rigging	1.5
AFPM F267	Airframe Inspections	0.5
AFPM F270	Airframe Testing	0.5
Airframe Systems and Components Requirements		
AFPM F230	Aircraft Electrical Systems	2.5
AFPM F253	Transport Category Aircraft	1
AFPM F254	Ice and Rain Control Systems	0.5
AFPM F256	Communications and Navigation Systems	0.5
AFPM F258	Cabin Atmosphere Control Systems	1
AFPM F259	Hydraulic and Pneumatic Systems	1.5
AFPM F260	Aircraft Landing Gear Systems	1.5
Powerplant Theory and Maintenance Requirements		
AFPM F235	Aircraft Reciprocating Engines	4.5
AFPM F240	Turbine Engines	2
AFPM F271	Powerplant Inspections	0.5
AFPM F272	Powerplant Testing	0.5
Powerplant Systems and Components Requirements		
AFPM F231	Powerplant Electrical Systems	1.5
AFPM F244	Lubricating Systems	1.5

AFPM F245	Ignition Systems	2
AFPM F246	Fuel Metering Systems	2
AFPM F248	Induction Systems	0.5
AFPM F249	Powerplant Cooling Systems	0.5
AFPM F250	Powerplant Exhaust Systems	0.5
AFPM F252	Propellers	2
Combined Systems and Components Requirements		
AFPM F251	Fuel Systems	1.5
AFPM F255	Fire Protection Systems	0.5
AFPM F257	Instrument Systems	0.5

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