

AEROSPACE ACADEMY

1st Year Program of Studies

Courses in blue articulate into associate of applied science degree (AAS).

Fall Semester	Credit	Spring Semester	Credit
AERM 1315 Aviation Science <i>*10hr OSHA</i> Fundamentals of mathematics, physics & drawing as they apply to aircraft principles & operations.	3	AERM 1208 Federal Aviation Regulations A course in the use & understanding of the FAA and aircraft manufacturer's publications, forms and records.	2
AERM 1303 Shop Practice Introduction to the correct use of hand tools and equipment & precision measurement; identification of aircraft hardware; and fabrication of fluid lines and tubing.	3	AERM 1205 Weight & Balance An introduction to FAA required subjects relating to weighing of aircraft, performance of weight & balance calculations, & appropriate maintenance of record entries.	2
		AERM 1310 Ground Operations An introduction course in fuels, servicing methods and procedures, aircraft movement, securing and operations of aircraft, external power equipment, aircraft cleaning, and corrosion control.	3
Fall Semester Total	6	Spring Semester Total	7
Year 1 Total <i>Occupational Skills Award Aircraft Technology (OSA)</i>			13
Summer Semester	Credit		
AERM 2486 Internship: Aircraft Mechanics & Aircraft Maintenance Technology/Technician Practical, general workplace training supported by an individualized learning plan.	4		
Summer Semester Total		4	

2nd Year Program of Studies

Courses in blue articulate into associate of applied science degree (AAS).

Fall Semester <i>Aircraft Structures Mechanic</i>	Credit	[OR]	Fall Semester <i>Aircraft Turbine Mechanic</i>	Credit
AERM 1414 Basic Electricity A study of aircraft electrical systems and their requirements.	4		AERM 1414 Basic Electricity A study of aircraft electrical systems and their requirements.	4
AERM 1254 Aircraft Composite A study of the inspection & repair of composite, fiber-glass, honeycomb, and laminated structural materials.	2		AERM 1254 Aircraft Composite A study of the inspection & repair of composite, fiber-glass, honeycomb, and laminated structural materials.	2
Spring Semester <i>Aircraft Structures Mechanic</i>	Credit		Spring Semester <i>Aircraft Turbine Mechanic</i>	Credit
AERM 1241 Wood, Fabric & Finishes A course in the use & care of various covering materials, finishes, & wood structures including approved methods and procedures.	2		AERM 1351 Aircraft Turbine Engine Theory Theory, history & servicing of turbine engines.	3
AERM 1352 Aircraft Sheet Metal A course in inspection & repair of sheet metal structures.	3		AERM 2351 Aircraft Turbine Engine Overhaul Topics address inspection, disassembly, re assembly & replacement of gas turbine engines, sections, & components as well as operational troubleshooting & analysis.	3
Spring Semester Total	5		Spring Semester Total	6
Year 2 Total Level I Certificate of Completion Aircraft Structures Mechanic	11		Year 2 Total Level I Certificate of Completion Aircraft Turbine Mechanic	12

Two Year Program of Studies: 10 Courses totaling 28 (Structures) or 29 (Turbine) credit hours

The Alamo Colleges do not discriminate on the basis of race, religion, color, national origin, sex, age, or disability with respect to access, employment programs, or services. Inquiries or complaints concerning these matters should be brought to the attention of: Director of Employee Services, Title IX Coordinator, (210) 485-0200.

Level I Certificate of Completion
Aircraft Structures Mechanic

ASSOCIATE OF APPLIED SCIENCES

Aircraft Technician Airframe

Courses in blue articulate into associates of applied science degree.(AAS)

Semester 1	Credit
AERM 1205 <i>Weight & Balance</i>	2
AERM 1208 <i>Federal Aviation Regulations</i>	2
AERM 1310 <i>Ground Operations</i>	3
AERM 1303 <i>Shop Practices</i>	3
AERM 1315 <i>Aviation Science</i>	3
AERM 1414 <i>Basic Electricity</i>	4
AERM 1241 <i>Wood, Fabric & Finishes</i>	2
AERM 1347 <i>Aircraft Auxiliary Systems</i>	3
1st Semester Total	22
Semester 2	Credit
AERM 1449 <i>Hydraulic, Pneumatic, & Fuel Systems</i>	4
AERM 1254 <i>Aircraft Composites</i>	2
AERM 1253 <i>Aircraft Welding</i>	2
AERM 1352 <i>Aircraft Sheet Metal</i>	3
AERM 2233 <i>Assembly & Rigging</i>	2
AERM 1243 <i>Instruments & Navigation/Communication</i>	2
AERM 1345 <i>Aircraft Electrical Systems</i>	3
2nd Semester Total	18
Semester 3	Credit
AERM 2231 <i>Airframe Inspection</i>	2
AERM 1350 <i>Landing Gear Systems</i>	3
3rd Semester Total	5
Semester 4	Credit
ENGL 1301 <i>Composition I</i>	3
MATH 1332 <i>Contemporary Mathematics or other*</i>	3
PHYS 1305 <i>Introductory to Physics I Lecture or other*</i>	3
ECON 1301 <i>Introduction to Economics or other*</i>	3
- <i>Select a Creative Arts (50) Core</i>	3
4th Semester Total	15
Program Total	60

DC/AA: 24	Total AAS Hours: 60
Hours needed Post DC/AA: 36	General Academics: 15
	Specific Hours: 45

Level I Certificate of Completion
Aircraft Turbine Mechanic

ASSOCIATE OF APPLIED SCIENCES

Aircraft Technician Powerplant

Courses in blue articulate into associates of applied science degree.(AAS)

Semester 1	Credit
AERM 1205 <i>Weight & Balance</i>	2
AERM 1208 <i>Federal Aviation Regulations</i>	2
AERM 1310 <i>Ground Operations</i>	3
AERM 1303 <i>Shop Practices</i>	3
AERM 1315 <i>Aviation Science</i>	3
AERM 1414 <i>Basic Electricity</i>	4
AERM 1357 <i>Fuel Metering & Induction Systems</i>	3
1st Semester Total	20
Semester 2	Credit
AERM 1444 <i>Aircraft Reciprocating Engines</i>	4
AERM 2547 <i>Aircraft Reciprocating Engine Overhaul</i>	5
AERM 1351 <i>Aircraft Turbine Engine Theory</i>	3
AERM 2351 <i>Aircraft Turbine Engine Overhaul</i>	3
AERM 1456 <i>Powerplant Electrical</i>	4
2nd Semester Total	19
Semester 3	Credit
AERM 2352 <i>Aircraft Powerplant Inspection</i>	3
AERM 1340 <i>Aircraft Propellers</i>	3
3rd Semester Total	6
Semester 4	Credit
ENGL 1301 <i>Composition I</i>	3
MATH 1332 <i>Contemporary Mathematics or other*</i>	3
PHYS 1305 <i>Introductory to Physics I Lecture or other*</i>	3
ECON 1301 <i>Introduction to Economics or other*</i>	3
- <i>Select a Creative Arts (50) Core</i>	3
4th Semester Total	15
Program Total	60

DC/AA: 23	Total AAS Hours: 60
Hours needed Post DC/AA: 37	General Academics: 15
	Specific Hours: 45