ALAMO COLLEGES

ALAMO ACADEMIES

AEROSPACE ACADEMY

1st Year Program of Studies

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

Fall Semester		Credit
AERM 1315 *10hr OSHA	**Aviation Science** Fundamentals of mathematics,physics & drawing as they apply to aircraft principles & operations.	3
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
Fall Semester Total		6

Spring Semester		Credit
AERM 1208	**Federal Aviation Regulations** A course in the use & understanding of the FAA and aircraft manufacturer's publications, forms and records.	2
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
Spring Semester Total		7

Year 1 Total *Occupational Skills Award Aircraft Technology (OSA)* — 13

Summer Semester		Credit
AERM 2480	**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 | *Aircraft Structures Mechanic*		Credit
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
		6

[OR]

Fall Semester | | *Aircraft Turbine Mechanic*		Credit
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
		6

Spring Semester | *Aircraft Structures Mechanic*		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 1352	**Aircraft Sheet Metal** A course in inspection & repair of sheet metal structures.	3
Spring Semester Total		5

Spring Semester | *Aircraft Turbine Mechanic*		Credit
AERM 1351	**Aircraft Turbine Engine Theory** Theory, history & servicing of turbine engines.	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		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

AEROSPACE ACADEMY

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
ENGL 1301	Composition I or other*	3
MATH 1333	Contemporary Mathematics II or other*	3
PHYS 1305	Introductory to Physics I Lecture or other*	3
ECON 1301	Introduction to Economics or other*	3
ARTS 2326	Sculpture I or other*	3
1st Semester Total		15

Semester 2		Credit
AERM 1205	Weight & Balance	2
AERM 1208	Federal Aviation Regulations	2
AERM 1310	Ground Operations	3
AERM 1303	Shop Practices	3
AERM 1315	Aviation Science	3
AERM 1414	Basic Electricity	4
AERM 1241	Wood, Fabric & Finishes	2
2nd Semester Total		19

Semester 3		Credit
AERM 1243	Instruments & Navigation/Communication	2
AERM 2231	Airframe Inspection	2
AERM 1345	Aircraft Electrical Systems	3
3rd Semester Total		7

Semester 4		Credit
AERM 1449	Hydraulic, Pneumatic, & Fuel Systems	4
AERM 1350	Landing Gear Systems	3
AERM 1254	Aircraft Composites	2
AERM 1253	Aircraft Welding	2
AERM 1352	Aircraft Sheet Metal	3
AERM 1347	Aircraft Auxiliary Systems	3
AERM 2233	Assembly & Rigging	2
4th Semester Total		19

Program Total	60

DC/AA: 24	Total AAS Hours: 60
Hours needed Post DC/AA: 36	General Academics: 15
	Specific Hours: 21

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
ENGL 1301	Composition I or other*	3
MATH 1333	Contemporary Mathematics II or other*	3
PHYS 1305	Introductory to Physics I Lecture or other*	3
ECON 1301	Introduction to Economics or other*	3
ARTS 2326	Sculpture I or other*	3
1st Semester Total		15

Semester 2		Credit
AERM 1205	Weight & Balance	2
AERM 1208	Federal Aviation Regulations	2
AERM 1310	Ground Operations	3
AERM 1303	Shop Practices	3
AERM 1315	Aviation Science	3
AERM 1414	Basic Electricity	4
AERM 1444	Aircraft Reciprocating Engines	4
2nd Semester Total		21

Semester 3		Credit
AERM 2352	Aircraft Powerplant Inspection	3
3rd Semester Total		3

Semester 4		Credit
AERM 2547	Aircraft Reciprocating Overhaul	5
AERM 1340	Aircraft Propellers	3
AERM 1351	Aircraft Turbine Engine Theory	3
AERM 2351	Aircraft Turbine Engine Overhaul	3
AERM 1456	Powerplant Electrical	4
AERM 1357	Fuel Metering & Induction Systems	3
4th Semester Total		21

Program Total	60

DC/AA: 23	Total AAS Hours: 60
Hours needed Post DC/AA: 37	General Academics: 15
	Specific Hours: 22

See St. Philip's College degree description for more information: http://myspccatalog.alamo.edu/