

## AEROSPACE ACADEMY

### 1st Year Program of Studies

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

Fall Semester	Credit	Spring Semester	Credit
<b>AERM 1315</b> <b>Aviation Science</b> <i>*10hr OSHA</i> Fundamentals of mathematics, physics & drawing as they apply to aircraft principles & operations.	3	<b>AERM 1208</b> <b>Federal Aviation Regulations</b> A course in the use & understanding of the FAA and aircraft manufacturer's publications, forms and records.	2
<b>AERM 1303</b> <b>Shop Practice</b> Introduction to the correct use of hand tools and equipment & precision measurement; identification of aircraft hardware; and fabrication of fluid lines and tubing.	3	<b>AERM 1205</b> <b>Weight &amp; Balance</b> An introduction to FAA required subjects relating to weighing of aircraft, performance of weight & balance calculations, & appropriate maintenance of record entries.	2
		<b>AERM 1310</b> <b>Ground Operations</b> 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
<b>Fall Semester Total</b>	<b>6</b>	<b>Spring Semester Total</b>	<b>7</b>
<b>Year 1 Total</b> <i>Occupational Skills Award Aircraft Technology (OSA)</i>			<b>13</b>

Summer Semester	Credit
<b>AERM 2486</b> <b>Internship: Aircraft Mechanics &amp; Aircraft Maintenance Technology/Technician</b> Practical, general workplace training supported by an individualized learning plan.	4
<b>Summer Semester Total</b>	<b>4</b>

### 2nd Year Program of Studies

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

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

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

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**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	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
AERM 1347	Aircraft Auxiliary Systems	3
<b>1st Semester Total</b>		<b>22</b>
Semester 2		Credit
AERM 1449	Hydraulic, Pneumatic, & Fuel Systems	4
AERM 1254	Aircraft Composites	2
AERM 1253	Aircraft Welding	2
AERM 1352	Aircraft Sheet Metal	3
AERM 2233	Assembly & Rigging	2
AERM 1243	Instruments & Navigation/Communication	2
AERM 1345	Aircraft Electrical Systems	3
<b>2nd Semester Total</b>		<b>18</b>
Semester 3		Credit
AERM 2231	Airframe Inspection	2
AERM 1350	Landing Gear Systems	3
<b>3rd Semester Total</b>		<b>5</b>
Semester 4		Credit
ENGL 1301	Composition I	3
MATH 1332	Contemporary Mathematics or other*	3
PHYS 1305	Introductory to Physics I Lecture or other*	3
ECON 1301	Introduction to Economics or other*	3
-	Select a Creative Arts (50) Core	3
<b>4th Semester Total</b>		<b>15</b>
<b>Program Total</b>		<b>60</b>

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	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 1357	Fuel Metering & Induction Systems	3
<b>1st Semester Total</b>		<b>20</b>
Semester 2		Credit
AERM 1444	Aircraft Reciprocating Engines	4
AERM 2547	Aircraft Reciprocating Engine Overhaul	5
AERM 1351	Aircraft Turbine Engine Theory	3
AERM 2351	Aircraft Turbine Engine Overhaul	3
AERM 1456	Powerplant Electrical	4
<b>2nd Semester Total</b>		<b>19</b>
Semester 3		Credit
AERM 2352	Aircraft Powerplant Inspection	3
AERM 1340	Aircraft Propellers	3
<b>3rd Semester Total</b>		<b>6</b>
Semester 4		Credit
ENGL 1301	Composition I	3
MATH 1332	Contemporary Mathematics or other*	3
PHYS 1305	Introductory to Physics I Lecture or other*	3
ECON 1301	Introduction to Economics or other*	3
-	Select a Creative Arts (50) Core	3
<b>4th Semester Total</b>		<b>15</b>
<b>Program Total</b>		<b>60</b>

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