Aviation Maintenance Technology

Semester Course Outline • 2023 – 2024

18 Months (4 Semesters) • **Revised: 1/18/23**
Credits Required for Diploma: 71
Associate of Applied Science (A.A.S.) Degree • Credits Required for Graduation: 84.5

First Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
AVM 100	FAR's Publications	42	1.5
AVM 103	Applied Mathematics/Aircraft Weight and Balance	70	2.5
AVM 106	Physics/Aerodynamics	42	1.5
AVM 109	Ground Operations and Servicing	28	1
AVM 112	Aircraft Drawings	42	1.5
AVM 115	Materials and Processes	56	2
AVM 118	Shop Practices and Safety	42	1.5
AVM 121	Basic Electricity	70	2.5
AVM 124	Welding and Tubular Structures	28	1
AVM 127	Corrosion Control and Cleaning	56	2
AVM 130	Assembly and Rigging	42	1.5
AVM 133	Airframe Fuels and Fuel Systems	28	1
AED 100	Automated External Defibrillator	14	.5
Total		560	20

First Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
AVM 136	Non-Metallic/Composite Structures	84	3
AVM 139	Metallic Structures	84	3
AVM 142	Hydraulic and Pneumatic Power Systems/Lines and Fittings	56	2
AVM 145	Landing Gear Systems	56	2
AVM 148	Airframe Electrical Systems	84	3
AVM 151	Airframe Instrument Systems	28	1
AVM 154	Communication/Navigation Systems	56	2
AVM 157	Utility Systems	70	2.5
AVM 160	Environmental Systems	42	1.5
AVM 163	Airframe Inspections	56	2
• CSC 100	Computer Concepts	15	1
Total		631	23

Semester Course Outline • 2023 – 2024

Second Year – Fall Semester

Course Number	Course Title	Clock Hours	Credits
AVM 203	Reciprocating Engine Technology	42	1.5
AVM 206	Reciprocating Engine Maintenance and Overhaul	84	3
AVM 209	Engine Removal and Installation	42	1.5
AVM 218	Lubricants and Lubrication Systems	56	2
AVM 221	Fuels and Fuel Metering Systems	56	2
AVM 227	Propeller and Rotor Systems	70	2.5
AVM 230	Ignition and Starting Systems	70	2.5
CSS 100	Career Search Strategies	14	.5
	Total	434	15.5

Second Year – Spring Semester

Course Number	Course Title	Clock Hours	Credits
AVM 212	Gas Turbine Engine Technology	42	1.5
AVM 215	Gas Turbine Engine Service and Maintenance	84	3
AVM 224	Fire Protection Systems	14	.5
AVM 233	Induction and Supercharger Systems	28	1
AVM 236	Powerplant Electrical Systems	84	3
AVM 239	Cooling Systems	14	.5
AVM 242	Exhaust and Thrust Reverser Systems	14	.5
AVM 245	Powerplant Instrument Systems	28	1
AVM 248	Powerplant Inspections	42	1.5
	Total	350	12.5

Semester Course Outline • 2023 – 2024

Associate of Applied Science (A.A.S.) Degree in Aviation

- To facilitate progress towards the Associate of Applied Science (A.A.S.) degree, students may choose to substitute the following courses:

  CSC 105 – Computer Software Applications or CSC 102 – Windows Applications for Technicians for CSC 100 – Computer Concepts.

  COMM 101 – Communications and Career Strategies for CSS 100 – Career Search Strategies.

To fulfill graduation requirements for the Associate of Applied Science (A.A.S) degree, students must select a course in each of the five (5) areas listed, completing 15 credits in general education. Students who select to take transferable communications course CMST 101 or ENGL 101, must also register for CSS 100 – Career Search Strategies for .5 credit. This curriculum is required for all Lake Area Tech graduates and is included in the COMM 101 course but is separate from the university system. Courses marked with an asterisk (*) can be transferred directly to the university system and may be substituted for recommended general education courses.

Behavioral Science
PSYC 100 – Psychology of Human Relations
PSYC 101 – General Psychology *

Communications
CMST 101 – Fundamentals of Speech *
COMM 101 – Communications and Career Strategies
ENGL 101 – Composition *

Computers
- CSC 102 – Windows Applications for Technicians
- CSC 105 – Computer Software Applications *

Mathematics
MATH 100 – Applied General Math
MATH 101 – Intermediate Algebra
MATH 114 – College Algebra *

Social Science
ECON 105 – Leadership in the Global Workplace
ECON 201 – Principles of Microeconomics I *
ECON 202 – Principles of Macroeconomics II *
SOC 100 – Introduction to Sociology *