AIRCRAFT/MAINTENANCE TECHNOLOGY (AMT)

AMT124 / Aircraft Forms and Regulations, Weight and Balance, Drawings, and Ground Operations
5 Credits / 9.0 Periods for Lecture & Lab
Federal Aviation maintenance publications, forms and records. Overview of technician's privileges and limitations. Perform aircraft weight and balance, aircraft ground operations and fuel servicing techniques. Drawings, symbols and schematic diagrams. Prerequisites: Admission to the Aircraft Maintenance Technology program.
Division: Aviation and Applied Technology

AMT126 / Fundamentals of Mathematics and Electricity
9 Credits / 12.0 Periods for Lecture & Lab
Mathematical computation of fundamental electrical circuit parameters. Basic definitions, laws, and concepts. Schematic, wiring, and parts placement diagrams. Test and troubleshoot electrical and electronic components and circuits. Prerequisites: Admission to the Aircraft Maintenance Technology program.
Division: Aviation and Applied Technology

AMT128 / Fundamentals of Aviation Physics, Corrosion Control, Materials and Processes, Fluid Lines and Fittin
5 Credits / 9.0 Periods for Lecture & Lab
Basic concepts of motion, fluid dynamics, heat and sound, aerodynamics, aircraft structure and theory of flight. Fluid lines and fittings, component identification, function, inspection, and installation. Cleaning and corrosion control, materials and processes, non-destructive testing, and precision measurement techniques. Prerequisites: Admission to the Aircraft Maintenance Technology program.
Division: Aviation and Applied Technology

AMT220 / Fundamentals Of Aircraft Wood Structures, Covering And Finishing, And Bonded Structures
3 Credits / 6.0 Periods for Lecture & Lab
Theories and techniques of aircraft wood structures. Inspection, test and repair of aircraft fabric and wood structures. Aircraft structural design and methods of working with selected materials. Characteristics of composites, inspections and repairs. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT222 / Atmosphere Control, Fire Detection, Ice and Rain Protection Systems
4 Credits / 6.0 Periods for Lecture & Lab
Operation and maintenance of aircraft auxiliary systems. Inspection, servicing, troubleshooting and repair of environmental control, ice and rain control, fire protection and warning systems. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT224 / Aircraft Sheet Metal
5 Credits / 11.0 Periods for Lecture & Lab
Inspection, fabrication, and repair techniques of aircraft structural and nonstructural components. Sheet metal heat-treating techniques. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT226 / Aircraft Landing Gear, Hydraulic, Pneumatic, Fuel, Position And Warning Systems
7 Credits / 12.0 Periods for Lecture & Lab
Identification, inspection, repair, and troubleshooting techniques of aircraft landing gear, hydraulic, fuel, pneumatic, and position and warning system components. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT228 / Aircraft Electrical Systems, Instruments, Fuel Indicating, Communication And Navigation Systems
7 Credits / 12.0 Periods for Lecture & Lab
Proper operation, inspection, servicing and troubleshooting of DC(Direct Current) and AC(Alternating Current) sources, systems, and components. Mechanical and electrical sensing and information display systems. Fuel indicator system inspections, repairs, and troubleshooting. Transmitter and receiver fundamentals. Avionics installation, inspection and testing. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT230 / Airframe Assembly, Inspection And Welding
6 Credits / 11.0 Periods for Lecture & Lab
Aircraft assembly and rigging. Flight control balancing and rigging. Airframe inspection techniques, reporting procedures, and aircraft jacking. Welding techniques, theory, and materials identification. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT263 / Aircraft Turbine Engines
5 Credits / 9.0 Periods for Lecture & Lab
Historical development and application of turbine engines. Theory of thrust and the design and environmental factors which influence thrust. Turbine engine troubleshooting, inspection, service, repair and overhaul. Operational characteristics and engine test techniques on the aircraft and in test cells. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT264 / Aircraft Reciprocating Engines
7 Credits / 11.0 Periods for Lecture & Lab
Historical development and application of reciprocating engines, theory, design, and operations. Techniques used in troubleshooting, overhaul, inspection, and repair of opposed and radial engines. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT266 / Engine Fuel Systems, Fuel Metering and Induction System
6 Credits / 9.0 Periods for Lecture & Lab
Inspection, servicing, troubleshooting, overhaul, and repair of aircraft fuel systems and components, fuel metering devices, injection systems, turbochargers, and superchargers. Induction system principles of operation and design. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT268 / Engine Electrical, Ignition and Starter Systems
6 Credits / 12.0 Periods for Lecture & Lab
Inspect, service, troubleshoot, overhaul, and repair of engine electrical, ignition, starter systems, and components. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT270 / Engine Instruments, Fire Protection And Lubrication, Cooling And Exhaust Systems
5 Credits / 8.0 Periods for Lecture & Lab
Operation, maintenance, servicing, inspection, repair, and troubleshooting of engine instruments, fire detection and extinguishing, engine lubrication, cooling, and exhaust systems. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology

AMT272 / Propeller Systems and Engine Inspections
4 Credits / 8.0 Periods for Lecture & Lab
Historical development, operation, disassembly, inspection, repair, and maintenance of propellers. Reciprocating and turbine engine inspection and documentation. Prerequisites: Admission to the program.
Division: Aviation and Applied Technology