
COURSES

AMT 101 GEN'L. MAINTENANCE PRACTICES**0 Lecture Hours 15 Lab Hours 5 Credit Hours**

This course introduces general aviation maintenance practices, including topics in mathematics, blueprints/charts, physics, maintenance forms and publications, human factors, ethics, and aircraft weight and balance. This course also introduces students to airframe material testing procedures. Additional topics include precision measurements, identification and selection of aircraft materials, basic heat-treating processes, penetrant, chemical etching and magnetic particle inspections, welding inspection, and the identification and selection of non-destructive testing methods. Prerequisites: None required. MAT 109 recommended.

AMT 102 MATERIALS AND PROCESSES**0 Lecture Hours 6 Lab Hours 2 Credit Hours**

This course introduces methods and procedures needed to maintain aircraft including cleaning and corrosion controls, fluid lines, pneumatic lines, and fittings. Aircraft general servicing and ground operations are also included. Prerequisite: AMT 101 with a grade of C or better or permission of the department

AMT 103 BASIC AIRCRAFT ELECTRICITY**0 Lecture Hours 6 Lab Hours 2 Credit Hours**

This course introduces the basic electrical terms and calculations, including voltage, resistance, capacitance, inductance, and power. Reading and interpreting electrical circuit diagrams and the inspection and servicing of batteries are also introduced. Prerequisites: AMT 102 with a grade of C or better or permission of the department

AMT 104 AIRFRAME SYSTEMS I**0 Lecture Hours 15 Lab Hours 5 Credit Hours**

This course introduces methods and procedures needed to maintain, service and repair airframe structures. Students will learn inspection practices. They will also learn to troubleshoot and service electronic instrument systems. Installation and service of electrical, pneumatic and hydraulic components associated with airframe systems are also introduced. Prerequisites: AMT 103 with a grade of C or better or permission of the department.

AMT 105 AIRFRAME SYSTEMS II**0 Lecture Hours 9 Lab Hours 3 Credit Hours**

This course introduces methods and procedures needed to maintain, service and repair ice and rain control systems. Students will learn to inspect, troubleshoot and service hydraulic and pneumatic power systems. Methods and procedures needed to maintain aircraft landing gear systems and components are also introduced. Prerequisites: AMT 104 with a grade of C or better or permission of the department

AMT 106 AIRCRAFT STRUCTURES I**0 Lecture Hours 9 Lab Hours 3 Credit Hours**

This course introduces methods and procedures needed to inspect and repair wood structures aircraft coverings and exterior finishes as defined by Federal Aviation Regulations and Advisory Circular AC 43. 13-1B. Topics will include identification, inspection and repair of wood structures, selection, inspection and repair of fabric and fiberglass coverings, and application of trim and letters. Students will learn the proper rigging of fixed wing and rotorcraft assemblies and moveable surfaces. Properly raising and lowering an aircraft is introduced. Prerequisites: AMT 105 with a grade of C or better or permission of the department

AMT 107 AIRCRAFT STRUCTURES II**0 Lecture Hours 12 Lab Hours 4 Credit Hours**

This course introduces materials, equipment, tools, and procedures required for the inspection and repairs to aircraft sheet metal structures as defined by the Federal Aviation Regulations and Advisory Circular AC 43. 13-1B. Topics will include identification, inspection and repair of bonded, plastic, and honeycomb and laminated structures. Students will identify common aircraft materials and discuss their properties. Prerequisites: AMT 106 with a grade of C or better or permission of the department

AMT 108 WELDING & AIRFRAME INSPECTION**0 Lecture Hours 6 Lab Hours 2 Credit Hours**

This course introduces methods and procedures needed to understand basic principles of various types of aircraft welding. Students learn inspection, troubleshooting and repair, and operation of aircraft fuel systems, and will be able to perform airframe conformity and airworthiness inspections. Prerequisite: AMT 107 with a grade of C or better or permission of the department

AMT 109 INTRO TO POWER PLANT**0 Lecture Hours 9 Lab Hours 3 Credit Hours**

This course introduces methods and procedures required to maintain engine fire protection and engine systems. This course also introduces the auxiliary power unit (APU), un-ducted fan engines and reciprocating engines. Prerequisite: AMT 108 with a grade of C or better or permission of the department

AMT 110 RECIPROCATING ENGINES

0 Lecture Hours 6 Lab Hours 2 Credit Hours

This course introduces methods, procedures, and skills necessary to overhaul aircraft reciprocating engines. Prerequisite: AMT 109 with a grade of C or better or permission of the department

AMT 111 TURBINE ENGINE & PWR PLNT SYST

0 Lecture Hours 12 Lab Hours 4 Credit Hours

This course introduces methods and procedures to inspect, service, repair, install and troubleshoot turbine engines and associated engine systems. Prerequisite: AMT 110 with a grade of C or better or permission of the department

AMT 112 POWER PLANT SYSTEMS

0 Lecture Hours 18 Lab Hours 6 Credit Hours

This course introduces methods and procedures necessary to inspect, service, repair, install and troubleshoot engine systems and associated components, and to control engine fuel, induction, ignition, starting systems and associated instruments. Other topics include methodology and procedures necessary to inspect, service, troubleshoot and repair exhaust systems, engine reverser systems, and propeller systems. Prerequisite: AMT 111 with a grade of C or better or permission of the instructor

AMT 113 PWR PLANT INSPCTN & ELECTRICAL

0 Lecture Hours 6 Lab Hours 2 Credit Hours

This course introduces methods and procedures necessary to install and repair engine electrical systems. Methodology and procedures required for airframe and engine airworthiness inspections are introduced. Prerequisite: AMT 112 with a grade of C or better or permission of the department