

AVIATION POWERPLANT MECHANICS, CLOCK HOUR CERTIFICATE

Program Code: APPM
Meta-Major: STEM
Location(s): Melbourne
Delivery Method(s): On-Campus
Previous Degree Required: HS Diploma
Eligible for Financial Aid: Yes
Additional Limited Access Application Process Required: Yes
Program Testing Requirements: TABE - Test of Adult Basic Education
Classification of Instructional Programs (CIP) Code: 47.0608
Florida Department of Education CIP Code: 0647060801

This program prepares students for a rewarding career in the commercial and general aviation industries. Instruction consists of academic as well as laboratory training designed to prepare individuals for the Federal Aviation Administration (FAA) written, oral and practical certification examination for the Powerplant Mechanic rating. With this rating, individuals will be qualified for a position as an Aviation Maintenance Technician with the FAA Powerplant Rating. It is recommended that students pursue both the Airframe and Powerplant ratings for maximum employment potential.

FAA certified maintenance technicians have the important responsibility of keeping aircraft and related equipment working safely and efficiently. Aviation Maintenance Technicians employed by the industry perform routine inspection, maintenance, servicing, and repairs and engage in the manufacture or assembly of new aircraft.

Students are admitted to the Aviation Powerplant Mechanics program on a selective basis. The program is structured as a full-time, cohort program. The program is structured as a full-time, cohort program. [Visit the program page for more details and how to apply](#) or by calling (321) 433-5440.

Certificate Requirements

Code	Title	Clock Hours
Completion Group 1		
AMT 0708	Aviation Maintenance Technology General 1	225
AMT 0709	Aviation Maintenance Technology General 2	225
Completion Group 2		
AMT 0821	Aviation Maintenance Technology Powerplant 1	225
AMT 0822	Aviation Maintenance Technology Powerplant 2	225
AMT 0823	Aviation Maintenance Technology Powerplant 3	225
AMT 0824	Aviation Maintenance Technology Powerplant 4	225
Total Clock Hours		1350

Learning Outcomes: Aviation Airframe Mechanic CTC

1. Demonstrate proficiency in general hangar and shop safety, environmental concerns, mathematics, physics, basic aerodynamics, federal aviation regulations, publications and records, aircraft

hardware, precision measuring instruments, blueprints and drawings, hand and power tools, and fluid lines and fittings.

- *Core Ability Supported: Work Cooperatively*
2. Demonstrate proficiency in basic electricity, DC electrical circuits, aircraft battery service and inspection, AC electrical circuits and solid-state circuits, structural materials and processes, non-destructive inspection, aircraft cleaning and corrosion control, weight and balance, and aircraft ground operations and servicing.
 - *Core Ability Supported: Process Information*
 3. Demonstrate the skills necessary to maintain reciprocating engines, their ignition systems, fuel metering and induction systems, engine exhaust, cooling, lubricating, propellers, and propeller governing systems.
 - *Core Ability Supported: Process Information*
 4. Demonstrate the skills required to repair reciprocating engines including their removal, overhaul, installation, and operation.
 - *Core Ability Supported: Think Critically and Solve Problems*
 5. Demonstrate the skills necessary to maintain turbine engines, engine fire protection, engine instrument systems, lubrication, cooling, ignition, fuel metering systems, and powerplant electrical systems.
 - *Core Ability Supported: Communicate Effectively*
 6. Demonstrate the skills required for turbine engine removal, overhaul, installation, and operation.
 - *Core Ability Supported: Think Critically and Solve Problems*