



George T. Baker Aviation School - Miami-Dade County Public Schools - 3275 N.W. 42 Avenue, Miami, Florida 33142

# HIGH SCHOOL AIRCRAFT MAINTENANCE TECHNICIAN PROGRAM

This program prepares students for employment as an aircraft mechanic. Students who complete the Airframe and/or Powerplant Technician Program(s) are eligible to take the Federal Aviation Administration written and the oral examinations to become a certificated Airframe or Powerplant Technician. High school students may complete the second program as an adult student. The school is certificated by the FAA under Certificate #CT9T072R.

**General:** The General curriculum is a one-year prerequisite for both the Airframe Technician and/or Powerplant Technician Programs.

**Airframe:** The Airframe Technician Program is a two-year program consisting of an in depth study of aircraft structures and systems.

**Powerplant:** The Powerplant Technician Program is a two-year program consisting of an in depth study of powerplant theory and maintenance of aircraft engine operations and systems.

**Target Group:** 10th, 11th, and 12th Grade Students

**Credits:** Nine Elective Credits (three-year program)

## Course Curriculum

### General

Math  
Weight and Balance  
Materials and Processes  
Aircraft Drawing  
Ground Handling  
Basic Electricity  
Physics  
Maintenance Forms and Records  
Maintenance Publications  
Mechanics, Privileges, and Limitations  
Nondestructive Testing  
Hand Tools  
Fluid Lines and Fittings  
Corrosion Control  
Employability Skills

### Airframe

Flight Theory  
Assembly and Rigging  
Wood Structures  
Aircraft Covering  
Aircraft Finishes  
Aircraft Inspection  
Sheetmetal  
Composites  
Welding  
Hydraulics and Pneumatics  
Landing Gear  
Communication and Navigation  
Fire Protection  
Fuel Systems  
Instrument Systems  
Airframe Electrical  
Position and Warning  
Cabin Atmosphere  
Ice and Rain Removal

### Powerplant

Reciprocating Engine  
Reciprocating Engine Overhaul  
Turbine Engine Theory  
Turbine Engine Overhaul  
Engine Removal and Installation  
Engine Operation, Troubleshooting, and Repair  
Engine Inspection  
Ignition Systems  
Fuel and Fuel Metering Systems  
Lubrication Systems  
Engine Electrical and Starting Systems  
Engine Instrument Systems  
Propellers  
Engine Cooling Systems  
Engine Induction Systems  
Engine Exhaust and Reverser Systems  
Fire Protection

**See your counselor or occupational placement specialist for more details.**

George T. Baker Aviation School is accredited by the Accrediting Commission of the Council on Occupational Education