



### **Certificates**

Aircraft Power Plants

Aircraft Anatomy and Aerodynamics

High Altitude

Certificate in Flight In Ice Condition

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Engineering field of aviation, aircraft power plants, anatomy, aerodynamics , high altitude and flight in ice conditions.



## CERTIFICATES

Succeeding in the modern day professional aviation world means having the competitive advantage of knowledge. Comprehensive knowledge can only be attained through quality education. Professionals need critical thinking skills to be more solid decision-makers that will help them grow. These real-world skills are available for learning through our process of education, and will be yours for practical use upon completion.

**BAL Technology Training** is pleased to offer our students a variety of certificates programs. With Certificate Programs in various fields, ranging from Aircraft PowerPlants, Aircraft Anatomy and Aerodynamics, High Altitude and Flight in Ice Conditions, we can fulfill any continued educational goals our students may have. This quality education is flexible for your tackle on your own time, while still continuing your daily activities, like work. Our certificates programs are specially created to give you the most current skills and strategies in your career field.

### **Benefits of a Certificate**

- Increasing your potential for earning
- Remain relevant in your field
- Earn a better job position
- Gain skills needed to be a success

### **Tuition Fee**

Cost of each Certificate Program: € 180



## Certificate in Aircraft Power Plants

### **Enroll requirements:**

- **GSE/O'Levels/11 Grade of High School**
- **Aircraft Maintenance License (not mandatory)**
- **Understanding of English is a must**
- **Holding a Student License/CPL/ATPL (not mandatory)**

## Program

### **Major: Reciprocating Engines**

- Aircraft Power Plant Classification and Progress
- Reciprocating-Engine Construction and Nomenclature
- Internal-Combustion Engine Theory and Performance
- Lubricants and Lubricating Systems
- Induction Systems, Superchargers, Turbochargers and Exhaust System
- Basic Fuel Systems and Carburetors
- Fuel Injection Systems
- Reciprocating-Engine Ignition and Starting Systems
- Operation, Inspection, Maintenance and Troubleshooting of Reciprocating Engines
- Reciprocating-Engine Overhaul Practices
- Engine Control Systems, Engine Indicating and Warning Systems.

**Major:** Gas-Turbine Engines

- Aircraft Power Plant Classification and Progress
- Gas-Turbine Engine: Theory, Construction and Nomenclature
- Gas-Turbine Engine: Fuels and Fuel System
- Turbine-Engine Lubricants and Lubricating Systems
- Ignition and Starting Systems of Gas\_turbine Engines
- Turbofan Engines
- Turboprop Engines
- Turboshaft Engines
- Gas-Turbine Operation, Inspection, Troubleshooting, Maintenance and Overhaul
- Engine Control Systems, Engine Indicating and Warning Systems

**Major:** Propeller

- Propeller Theory, Nomenclature and Operation
- Turbo-Propellers and Control Systems
- Propeller Installation, Inspection and Maintenance
- Engine Control Systems, Engine Indicating and Warning Systems

## Certificate in Aircraft Anatomy and Aerodynamics

**Enroll requirements:**

- **GSE/O'Levels/11 Grade of High School**
- **Aircraft Maintenance License (not mandatory)**
- **Understanding of English is a must**
- **Holding a Student License/CPL/ATPL (mandatory)**

## Program

**Major:** Aircraft Anatomy and Aerodynamics

- The Atmosphere
- The Operational Environment
- Land Planes
- Sea Planes
- The Aircraft Structure
- Mechanics of Flight; Air and Airflow; Aerofoils-Subsonic Speeds
- Thrust
- Level Flight; Gliding and Landing
- Performance
- Manoeuvres, Stability and Control
- Flight at Transonic Speeds
- Flight at Supersonic Speeds

## Certificate in High Altitude

### Enroll requirements:

- GSE/O'Levels/11 Grade of High School
- Aircraft Maintenance License (not mandatory)
- Understanding of English is a must
- Holding a Student License/CPL/ATPL (not mandatory)

## Program

### Major: High Altitude

1. Weather
  - Windshear
  - Enroute Weather
2. Flight Physiology
  - Divisions of the Atmosphere
  - Temperature and Pressure
  - Respiration
  - Decompression
  - Pressurization Systems
  - Oxygen Systems
  - Vision
3. High Speed Aerodynamics
  - Principles of High Speed Aerodynamics
  - Characteristics of High Speed Aerodynamics

## Certificate Flight in Ice Condition

### Enroll requirements:

- GSE/O'Levels/11 Grade of High School
- Aircraft Maintenance License (not mandatory)
- Understanding of English is a must
- Holding a CPL/ATPL (not mandatory)

## Program

### Major: Flight in Ice Conditions

1. Weather Revision on Icing
2. Weather Documentation
3. Aircraft de/anti-icing
4. Aircraft Ice Protection Systems
5. Performance
6. Procedures
7. Severe Icing

# *BAL Technology Training*

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