

## Apprenticeship Training Programme

### **Phase 1: With Employer**

Induction  
Introduction to Health & Safety  
Introduction to Tools & Equipment  
Introduction to Basic Skill

### **Phase 2A: Delivered in Training Centre (32 weeks)**

Course Content: (EASA Category A)  
Induction  
Mathematics  
Physics  
Electrical Fundamentals  
Digital Techniques  
Materials & Hardware  
Maintenance Practices  
Basic Aerodynamics  
Human Factors  
Aviation Legislation  
Turbine Aeroplane Aerodynamics, Structures & Systems  
Piston Aeroplane Aerodynamics, Structures & Systems  
Helicopter Aerodynamics, Structures & Systems  
Gas Turbine Engine  
Piston Engine  
Propeller

### **Phase 3A: With Employer**

Work Based Training and Assessments with portfolio of evidence

### **Phase 2B: Delivered in Training Centre (8 weeks)**

Course Content: (EASA Category B1/B2)  
Mathematics  
Physics  
Materials & Hardware  
Basic Aerodynamics  
Human Factors

### **Phase 3B: With Employer**

Work Based Training and Assessments with portfolio of evidence

### **Phase 4: Delivered in Educational Colleges (35 weeks)**

Course Content: (EASA Category B1/B2)  
Electrical Fundamentals  
Electronic Fundamentals  
Digital Techniques  
Maintenance Practices  
Aviation Legislation  
Turbine Aeroplane Aerodynamics, Structures & Systems  
Piston Aeroplane Aerodynamics, Structures & Systems  
Helicopter Aerodynamics, Structures & Systems  
Aircraft Aerodynamics, Structures and Systems  
Propulsion  
Gas Turbine Engine  
Piston Engine  
Propeller

# The Craft of Aircraft Mechanics



For further information please contact your  
local Education & Training Board Training  
Centre or log onto [www.SOLAS.ie](http://www.SOLAS.ie)



## What is an Aircraft Mechanic?

Aircraft Mechanics are employed throughout the aviation industry in a wide range of facilities designed to maintain light, rotary and large commercial aircraft. Aircraft Mechanics inspect, maintain and repair airframe structures, engines, electronic and avionics systems. The work is diverse, disciplined and highly regulated, both nationally and internationally.

The aviation industry uses advanced technology on new aircraft, which, with their increasing reliance on computerised control and aircraft management systems, means that the use of electronic and computer equipment is an important aspect of an Aircraft Mechanic's skills.

Aircraft Mechanics inspect, maintain and repair airframe structures, engines, electronic and avionics systems.

Aircraft Mechanics require many skills including:

- Understanding and application of physics
- Understanding the scientific uses and properties of materials
- Interpreting technical drawings and diagrams
- Using mathematics to solve technical or scientific problems
- Knowledge of electricity and electronics
- Controlling or adjusting equipment
- Inspecting and testing of systems and fault diagnosis
- Performing routine maintenance and repairs
- Accurate report writing skills and record keeping

## Personal Qualities and Skills

As an Aircraft Mechanic you will need to be physically active and to be able to work with your hands. An awareness of health and safety and good housekeeping is essential as well as attention to detail and an eye for the aesthetic.

The Aircraft Mechanic must have the ability to:

- Plan and organise
- Communicate effectively
- Solve problems
- Work independently and as part of a team
- Show a positive attitude
- Recognise the need for good customer relations
- Demonstrate good work practices including time keeping, tidiness, responsibility, quality awareness and safety awareness

## Aspects of work

- Learning and developing new practical craft related, Skill, Knowledge and Competence.
- Working with and learning from experienced Craftspersons
- Seeing a job through from start to finish
- Comply with Health and Safety requirements
- Working with technical drawings and diagrams
- Using mathematics to solve technical or scientific problems
- Understanding the scientific uses and properties of materials
- Accuracy and attention to detail
- Being well organised and careful with practical tasks
- Keeping accurate records or reports
- Being responsible for controlling or adjusting equipment
- Working with Electricity or Electronics
- Taking responsibility for own learning, including the allocation of study time
- Installing and repairing aircraft components
- Being physically active
- Passing all your phase exams (theory, practicals skills demonstration)
- Earning as you learn

## How to become an Apprentice

- You must obtain employment as an apprentice in your chosen occupation.
- The employer must be approved to train apprentices.
- The employer must register you as an apprentice within two weeks of recruitment.
- In certain crafts, apprenticeship applicants are required to pass a colour vision test approved by SOLAS.

## Entry Requirements

The minimum age at which the employment of an apprentice may commence is 16 years of age.

The minimum educational requirements are:

1. Grade D in five subjects in the Department of Education & Skills Junior Certificate Examination or an approved equivalent,

**or**

2. The successful completion of an approved Pre-Apprenticeship course

**or**

3. Three years' work experience gained over sixteen years of age in a relevant designated industrial activity as SOLAS shall deem acceptable

It should be noted that these are the current approved **minimum educational requirements** for apprenticeship programmes, however, previous experience of the following subjects would be an advantage but not essential: Technical Drawing/Graphics, Mathematics, Technology, Physics and Engineering.

## Opportunities on Qualification

On successful completion of the apprenticeship programme, apprentices are qualified to work within the recognised trade or profession.

Where craftspersons have the necessary ability and initiative, opportunities are available for advancement. These include advanced technology courses and management courses which are available in Institutes of Technology, Schools of Management and Professional Institutes.

Many craftspersons use their qualification as a platform to launch careers such as engineers, managers, owners of businesses, teachers and instructors amongst others.