

# **WORK-STUDY DIPLOMA IN AIRCRAFT CABIN ENGINEERING**

## **Module Objectives**

### **Aircraft Safety & Legislation**

On completion of this module, trainees should have been equipped with basic understanding of aviation legislation and should also be able to inspect, identify and rectify defective safety equipment, as well as conduct functional tests to ensure the serviceability of safety equipment.

### **Cabin Structure Maintenance**

On completion of this module, trainees should be able to perform proper handling tools, understand the importance of aviation maintenance practices and identify defects on ferrous, non-ferrous and composite materials. He/she should be able to apply the appropriate methods to rectify defects as well as perform functional checks.

### **Cabin Structure Material Testing**

On completion of this module, trainees should be equipped with knowledge about various types of cabin structural materials and be able to identify defects and perform various destructive and non-destructive testing on different kinds of materials and surfaces when necessary.

### **Cabin Seat Maintenance**

On completion of the module, trainees should be able to identify and repair defects in the structural, mechanical and electrical components of aircraft seats. He/she should also be able to perform refurbishment of seats to meet design specifications and industry standards.

### **Cabin Monument, Water & Waste System**

On completion of the module, trainees should be able to inspect, repair and overhaul various types of monuments and the lavatories throughout the aircraft and conduct functional tests on galley equipment and monuments, cabin water and waste systems to ensure their operating performance meet design specifications.

### **Cabin Electrical System**

On completion of the module, trainees should be able to inspect, identify and perform rectification on issues that occur in galley inserts. He/she should be equipped with the understanding of electric circuitry in order to perform these rectifications and proper handling of electrical components.

### **Cabin Aesthetics & Upholstery**

On completion of the module, trainees should be able to identify and repair upholstery damage, perform cleaning and refurbishment of upholstery to meet cabin design requirements and apply appropriate methods to enhance and refurbish cabin aesthetics.

### **Component Modelling**

On completion of the module, trainees should be able to design and model components using appropriate CAD tools. He/she should also be able to apply reverse engineering techniques to reproduce 3D component models and translating them into 2D engineering drawing.

### **Additive Manufacturing**

On completion of the module, trainees should be able to use the proper slicing tools to convert a non-load bearing 3D model into a 3D printable format. He/she should also then be able to optimise the print by adjusting the various parameters based on the print material and printer to produce a physical 3D object.

### **Company Project**

On completion of the module, trainees should have applied their acquired competencies in an authentic project that would value-add to the company.

### **On-the-Job Training**

On completion of the module, trainees should be able to apply the skills and knowledge acquired at ITE College and workplace to take on the full job scope, including supervisory function, where appropriate, at the company