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

#### **MODULE OBJECTIVES**

## **Module 1: Aircraft Safety Equipment**

On completion of this module, trainees should be able to inspect, identify and rectify defective safety equipment, as well as conduct functional tests to ensure the serviceability of safety equipment.

## **Module 2: Aircraft Upholstery**

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

#### **Module 3: Cabin Structure**

On completion of the module, trainee should be able to identify defects on ferrous, non-ferrous and composite materials. He/she should also be able to apply appropriate method to rectify defects as well as perform functional tests to ensure the structural integrity of repair work.

## Module 4: Integration & Performance I

On successful completion of the module, trainees should be able to integrate requisite skills, knowledge and professional attributes across different areas of competency centred around authentic work situations, and demonstrate proficiency in work performance.

## **Module 5: Cabin Seat Operations**

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.

## **Module 6: Aircraft Monuments & Equipment**

On completion of the module, trainees should be able to inspect, repair and overhaul various types of monuments throughout the aircraft and conduct functional tests on galley equipment and monuments.

#### Module 7: Water & Waste Systems

On completion of the module, trainees should be able to conduct functional test on cabin water and waste systems to ensure their operating performance meet design specifications. He/she should also be able to refurbish a suite of water and waste components to enhance operating reliability.

#### **Module 8: Integration & Performance II**

On successful completion of the module, trainees should be able to integrate requisite skills, knowledge and professional attributes across different areas of competency centred around authentic work situations, and demonstrate proficiency in work performance.

#### **Module 9: Cabin Aesthetics**

On completion of the module, trainees should be able to apply appropriate methods to enhance and refurbish cabin aesthetics for passengers' comfort.

# **Module 10: Component Modelling**

On completion of the module, trainees should be able to design and model non-load bearing components using appropriate CAD tools. He/she should also be able to apply reverse engineering techniques to reproduce 3D component models for fabrication using additive manufacturing or other appropriate technologies.

## **Module 11: 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.

## Module 12: 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.

# **OJT List of Competencies**

Course Title: Aircraft Cabin Engineering Level: Work-Study Diploma

	List of Competencies (Standard)
1.	Inspect safety equipment
2.	Remove safety equipment
3.	Install safety equipment
4.	Repair equipment attachments
5.	Maintain aircraft upholstery
6.	Repair floor covering
7.	Inspect cabin structure
8.	Repair structural component
9.	Fabricate structural component
10.	Perform surface finishing
11.	Inspect aircraft seat
12.	Maintain aircraft seat
13.	Repair aircraft seat component
14.	Inspect aircraft galley and monuments
15.	Maintain aircraft galley and monuments
16.	Repair aircraft galley equipment and monuments
17.	Inspect aircraft lavatory
18.	Maintain aircraft lavatory
19.	Repair aircraft lavatory
20.	Maintain decorative surfaces
21.	Perform aesthetics touch-up painting
22.	Refurbish seat panel
23.	Create 3D model
24.	Produce 3D components