### List of Competencies for On-the-Job Training (OJT) Work-Study Diploma in Aircraft Cabin Engineering

S/N	List of Competencies (Standard)	Company to indicate '√' for OJT competencies it can provide
1	Inspect safety equipment	
2	Remove safety equipment	
3	Install safety equipment	
4	Inspect cabin structural component	
5	Repair structural component	
6	Perform surface finishing	
7	Perform non-destructive testing on cabin structural part	
8	Restore cabin structural part	
9	Maintain aircraft seat	
10	Repair aircraft seat components	
11	Maintain cabin monument, water and waste system	
12	Repair cabin monument, water and waste system	
13	Inspect cabin electrical system	
14	Maintain cabin electrical system	
15	Maintain decorative surfaces and upholstery	
16	Perform aesthetics touch-up painting	
17	Produce 3D CAD model of components	
18	Produce 2D engineering drawing of components	
19	Prepare cabin component model for 3D printing	
20	Perform 3D printing of cabin components	
	Sub-total of Competencies (Standard)	
List	of Competencies (Company-specific)	
1		
2		
3		
4		
5		
	Sub-total of Competencies (Company-specific)	

#### Note:

- a) Company must be able to provide OJT for at least 75% of the List of Competencies (Standard).
- b) If company is unable to meet the 75%, please propose alternate **course-related** competencies which are unique to company operations. <u>Alternate competencies are capped at 25%</u>. *[i.e. 50% of the list of competencies (standard)* + 25% alternate competencies (Company-specific)].
- c) All alternate competencies (Company-specific) must be reviewed and endorsed by ITE.
- d) Trainees must receive OJT and be assessed for All competencies selected in this List.

Total no. of competencies selected by company for OJT

Total no. of competencies listed (standard & company specific)

Percentage of selected competencies

**Completed By:** 

Name

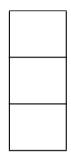
Company

Designation

Date

For ITE's Completion								
	Reviewed by CED / Co (For Company-specific Compe	Verified by IBT Officer						
Name:				Name				
Designation:		Date:		& Date:				

Version: June'23



## 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

# WSDip in Aircraft Cabin Engineering

# TRAINING PATTERN (DAY RELEASE)

		10 weeks	4 weeks	10 weeks	2 weeks	10 weeks	4 weeks	10 weeks	2 weeks
1 <sup>st</sup> Year	ITE	(Friday) 1 day/week	June Term Break	(Friday) 1 day/week	Sept Term Break	<b>(Friday)</b> 1 day/week	Dec Term Break	(Friday) 1 day/week	March Term Break
	Company	<b>4 days</b> /week	44 hrs / wk @ Company	<b>4 days</b> /week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company

<b>2</b> nd	ITE	(Friday) 1 day/week	June Term Break	(Friday) 1 day/week	Sept Term Break	(Friday) 1 day/week	Dec Term Break	(Friday) 1 day/week	March Term Break
Year	Company	<b>4 days</b> /week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company	<b>4 days</b> /week	44 hrs / wk @ Company	<b>4 days</b> /week	44 hrs / wk @ Company

3rd	ITE	(Friday) 1 day/week	June Term Break	(Friday) 1 day/week	Sept Term Break	
Year	Company	<b>4 days</b> /week	44 hrs / wk @ Company	<b>4 days</b> /week	44 hrs / wk @ Company	

Company: On-the-Job Training (70-80%) ITE College: Off-the-Job Training (20-30%)