

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

S/N	List of Competencies (Standard)	Company to indicate '✓' for OJT competencies it can provide
1	Perform aircraft launch and recovery procedures	
2	Perform visual inspection on aircraft structures	
3	Perform aircraft jacking and lowering	
4	Perform aircraft repositioning	
5	Perform aircraft routine servicing	
6	Analyse reliability studies in aircraft maintenance operations	
7	Perform tasks and manpower scheduling in aircraft maintenance operations	
8	Plan for ground support and spares availability for aircraft maintenance operations	
9	Perform wiring integrity checks on aircraft electrical systems	
10	Perform rectification of aircraft electrical system faults	
11	Perform rectification of aircraft communication system faults	
12	Perform rectification of aircraft navigation system faults	
13	Perform mechanical rigging of aircraft flight control system	
14	Perform landing gear retraction test	
15	Perform fuel system maintenance and repair	
16	Perform pneumatic system maintenance and repair	
17	Perform maintenance tasks on aircraft auxiliary systems	
18	Analyse maintenance operation floor layout	
19	Analyse maintenance operation workflow	
20	Analyse rejected maintenance work products	
21	Implement the approved work processes in preparing and maintaining aircraft component replacement records	
22	Implement approved quality management system for preparing and maintaining aircraft servicing records	
23	Execute risk analysis in aircraft maintenance operation	
24	Perform periodic aircraft engine maintenance	
25	Perform aircraft engine removal	
26	Perform aircraft engine installation	
27	Perform removal and installation of aircraft engine component(s)	
28	Determine root cause in work process challenges	

S/N	List of Competencies (Standard)	Company to indicate '✓' for OJT competencies it can provide
29	Derive viable solution	
30	Implement viable solution	
31	Evaluate solution for future enhancement	
	Sub-total of Competencies (Standard)	
List of Competencies (Company-specific)		
1		
2		
3		
4		
5		
6		
7		
8		
	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. Alternate competencies are capped at 25%.
[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 / College <i>(For Company-specific Competencies)</i>			Verified by IBT Officer
Name:			Name
Designation:		Date:	& Date:

Version: June'23

WORK-STUDY DIPLOMA IN AIRCRAFT MAINTENANCE ENGINEERING

MODULE OBJECTIVES

Module 1: Aircraft Line Maintenance

On completion of the module, trainees should be able to perform essential aircraft flight line maintenance procedures, including aircraft launch and recovery operations, first-line inspections on aircraft structures, aircraft repositioning, jacking, lowering and aircraft routine servicing.

Module 2: Aircraft Maintenance Planning

On completion of the module, trainees should be able to integrate reliability studies in aircraft maintenance planning for the scheduling of tasks and manpower as well as ground support and spares provision in aircraft maintenance operations.

Module 3: Electrical & Avionics Systems Maintenance

On completion of the module, trainees should be able to maintain, rectify and replace aircraft electrical and avionics components via first-line troubleshooting of aircraft electrical, communication and navigation systems.

Module 4: Aircraft Systems Maintenance

On completion of the module, trainees should be able to replace components, service and maintain aircraft mechanical systems via first-line inspection and troubleshooting of aircraft flight control, hydraulic, fuel, pneumatic and auxiliary systems.

Module 5: Lean Processes

On completion of the module, trainees should be able to infuse lean processes into aircraft maintenance operations, analyse and improve efficiency in maintenance workflow and error/deficiency management.

Module 6: Quality & Safety Management

On completion of the module, trainees should be able to integrate safety and quality management into aircraft maintenance operations for documentations compliance and risk analysis.

Module 7: Gas Turbine Engine Maintenance

On completion of the module, trainees should be able to replace, service, troubleshoot, inspect and maintain aircraft gas turbine engines and related components at the flight line.

Module 8: Work Improvement Management

On completion of the module, trainees should be able to systematically identify problems, derive, implement and evaluate viable solutions to solve work process challenges or improve efficiency.

Module 9: 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 10: 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 Maintenance Engineering

TRAINING PATTERN (DAY RELEASE)

		10 weeks	4 weeks	10 weeks	2 weeks	10 weeks	4 weeks	10 weeks	2 weeks
1 st Year	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
	Company	4 days/week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company

2 nd Year	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
	Company	4 days/week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company	4 days/week	44 hrs / wk @ Company

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

Legend:

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