

WORK-STUDY DIPLOMA IN AIRCRAFT ENGINE MAINTENANCE

MODULE OBJECTIVES

Module 1: Aircraft Engine Structure Maintenance

On completion of the module, trainees should be able to repair sheet metal structure and aircraft composite material components as well as performing tungsten inert gas (TIG) welding to repair component defects.

Module 2: Aircraft Engine Components Inspection

On completion of the module, trainees should be able to inspect aircraft engine components, perform chemical and mechanical cleaning on engine components, and perform measurements on aircraft engine components.

Module 3: Aircraft Engine Electrical System Maintenance

On completion of the module, trainees should be able to inspect aircraft engine electrical system, perform aircraft engine electrical system maintenance and prepare aircraft engine electrical components for OEM repair in accordance with statutory and organisational requirements.

Module 4: Non-Destructive Testing

On completion of the module, trainees should be able to perform various non-destructive testing (NDT) methods to detect defects in aircraft engine components.

Module 5: Aircraft Engine Maintenance Operation

On completion of the module, trainees should be able to handle aircraft engine received from customer, disassemble and assemble modules and parts of aircraft engine, and dispatch serviced aircraft engine to customer.

Module 6: Aircraft Engine Component Repair Operations

On completion of the module, trainees should be able to perform machining, electroplating and hot processes such as heat treatment, fluorocarbon cleaning, vapour aluminising to repair engine parts.

Module 7: Aircraft Engine Maintenance & Automation

On completion of the module, trainees should be able to set up and perform automated systems for thermal spray, polishing and laser welding on engine parts.

Module 8: 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 9: 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.