

WORK-STUDY DIPLOMA IN Electronics & Computer Engineering (Applied Electronics & AI)

MODULE OBJECTIVES

Core Modules

Electronics & Electrical Principles

On completion of the module, trainees should be able to manage operations and performance for equipment and products. They should also be able to manage equipment and product failures by implementing Electrostatic Discharge (ESD) Control measures and evaluating performance metrics.

IoT Devices & Networking

On completion of the module, trainees should be able to manage IoT network and connectivity by programming and deploying IoT devices, configuring IoT network connectivity and monitoring IoT data transmission for quality IoT data communication.

Data Analysis & Visualisation

On completion of the module, trainees should be able to extract and transform data into useful information, as well as create visual elements, to aid in business decision-making. They should also be able to manage projects through collaboration and teamwork.

Applied Electronics

On completion of the module, trainees should be able to install and troubleshoot various detection sensors, including video imaging, Lidar, ultrasonic as well as inertial measurement unit.

IoT Connectivity & Integration

On completion of the module, trainees should be able to deploy and manage IoT solutions, as well as implement remote monitoring, and maintaining IoT security.

Automation & Programming

On completion of the module, trainees should be able to manage automation process by designing, validating and optimising automation process.

AI & Machine Learning

On completion of the module, trainees should be able to deploy and deliver AI/Machine Learning (ML) solutions by automating data processing and evaluating AI/ML models.

Autonomous System Applications

On completion of the module, trainees should be able to set up, program and integrate autonomous robots for applications.

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.