

# LEVEL 4 AWARD IN ELECTRICAL TECHNOLOGY

## Program Description

The aim of the program is to equip students with a strong foundation in electrical, electronics, electrical machines, and electromechanical systems, combining theoretical knowledge with hands-on technical skills. It prepares students to analyze, design, and troubleshoot electrical circuits, electronic devices, and electromechanical systems while ensuring proficiency in machining, PCB fabrication, and PLC programming. The program emphasizes workplace safety, environmental compliance, and adaptability to emerging technologies. Through practical training in industry settings, students gain the experience needed to apply their skills in real-world industrial environments, preparing them for technical careers in these fields.

## Program Learning Outcomes

Upon successful completion of this program, the graduates will be able to:

1. Demonstrate knowledge of commission and maintain electrical equipment
2. Demonstrate ability to diagnose and test electrical equipment
3. Provide technical assistance
4. Read and interpret electrical diagrams
5. Comply with safety regulations and work effectively with others

## Requirements

### Completion Requirements

Students seeking the Level 4 Award in Mechanical Technology qualification must successfully complete 30 credits, including:

1. Mandatory core course credits 30 CH
2. On Job Training (MCT 130 [250hrs] and MCT 131 [250hrs]) 0 CH
3. Two preparatory English courses:
  - a. General English for Certificate (ESP 0103)
  - b. Workplace English for Certificate (GEC 0103)

Code	Title	Credit Hours
HSE 100	Explore Health, Safety and Environment at Workplace	2
ECT 120	Explore combination logics	3
MCT 100	Perform basic machining	4
ECT 121	Explore electronics	4
ECT 221	Create printed circuit boards	2
ECT 101	Explore AC electrical circuits	4
ECT 210	Illustrate the fundamentals of Programmable Logic Controllers (PLCs)	4
ECT 220	Test and maintain electrical transformers	3
ECT 222	Analyse Electrical Machines	4
MCT 130	On Job Training 1	0
MCT 131	On Job Training 2	0

Description	Data
Total Required Credits	30
Program Code	MPETT
Major Code	ETT

## Ideal Study Plan

### Recommended Sequence of Study

#### Level 4 Award in Electrical Technology

##### Year 1

Semester 1		Credit Hours
HSE 100	Explore Health, Safety and Environment at Workplace	2
ECT 120	Explore combination logics	3
MCT 100	Perform basic machining	4
ECT 121	Explore electronics	4
ECT 221	Create printed circuit boards	2
MCT 130	On Job Training 1	0
<b>Credit Hours</b>		<b>15</b>

##### Semester 2

ECT 101	Explore AC electrical circuits	4
ECT 210	Illustrate the fundamentals of Programmable Logic Controllers (PLCs)	4
ECT 220	Test and maintain electrical transformers	3
ECT 222	Analyse Electrical Machines	4
MCT 131	On Job Training 2	0
<b>Credit Hours</b>		<b>15</b>
<b>Total Credit Hours</b>		<b>30</b>