LEVEL 5 DIPLOMA IN ELECTRICAL TECHNOLOGY

Recognized NQC UAE National Qualification; Code: ENG05001NQ17

Program Description

The Level 5 Diploma in Electrical Technology program aims to provide learners with the knowledge, skills, and competencies to fit, adjust, install and repair electrical machinery and other electrical apparatus and equipment in buildings, factories, workshops or other places.

Program Learning Outcomes

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

1. Commission and maintain electrical equipment
2. Diagnose, test and repair electrical equipment
3. Provide technical assistance
4. Read and prepare electrical diagrams
5. Comply with safety regulations and work effectively with others

Occupation and Industry Sector

Requirements

Completion Requirements

Students seeking the Level 5 Diploma in Industrial and Manufacturing Technology qualification degree must successfully complete all mandatory core courses worth 90 credits.

Code	Title	Credit Hours
Mandatory core unit credits		16
Electrical stream credits (level 4)		16
Electrical stream credits (level 5)		23
Electrical optional credits (level 4)		11
Electrical optional credits (level 5)		24
Total Credits		90

Code	Title	Credit Hours
Electrical Stream Courses		
Required Credits : 39		
ECT 101	Explore AC electrical circuits	4
ECT 120	Explore combination logics	3
ECT 121	Explore electronics	4
ECT 122	Maintain electrical circuits and systems	3
ECT 123	Apply DC and AC machines in engineering	2
ECT 124	Write programs using C++	3
ECT 220	Test and maintain electrical transformers	3
ECT 221	Create printed circuit boards	2
ECT 222	Analyse Electrical Machines	4
ECT 223	Explore simulations of electrical circuits	2
ECT 224	Terminate and connect low voltage electrical cables	3
ECT 225	Demonstrate AC and DC principles in electronic circuits	3
MCT 111	Select instruments and sensors for measurement	3
Electrical Mandatory Core Courses		
Required credits : 16		
MCT 200	Interpret and document technical information	2
MCT 201	Apply engineering technology to real or simulated situations to produce technical solutions	4
MCT 230	Perform practical training and support in electromechanical based industries	10
Electrical Optional Courses		
Required credits : 35		
ECT 212	Explore the knowledge and skills of codes and standards in electrical engineering	2
ECT 100	Create Simple Software Programs	4
GED 100	Develop English language skills	3
HSE 100	Explore Health, Safety and Environment at Workplace	2
MCT 100	Perform basic machining	4
MCT 110	Interpret and Prepare Technical Drawings	3
MAT 210	Apply fundamental concepts and skills in algebra, geometry, and trigonometry	4
ECT 211	Develop leadership skills in work environment	2
MCT 120	Solve problems in work and energy	5
MCT 216	Develop knowledge of work organization and management	2
ECT 210	Illustrate the fundamentals of Programmable Logic Controllers (PLCs)	4

Description	Data
Total Required Credits	90
Program Code	DPELT
Major Code	EET

Ideal Study Plan

Recommended Sequence of Study
Level 5 Diploma in Electrical Technology

Year 1

Semester 1		**Credit Hours**
ECT 100	Create Simple Software Programs	4
GED 100	Develop English language skills	3
HSE 100	Explore Health, Safety and Environment at Workplace	2
MAT 210	Apply fundamental concepts and skills in algebra, geometry, and trigonometry	4
MCT 100	Perform basic machining	4
MCT 110	Interpret and Prepare Technical Drawings	3
	Credit Hours	**20**
Semester 2		
ECT 121	Explore electronics	4
ECT 122	Maintain electrical circuits and systems	3
ECT 124	Write programs using C++	3
ECT 211	Develop leadership skills in work environment	2
ECT 212	Explore the knowledge and skills of codes and standards in electrical engineering	2
ECT 225	Demonstrate AC and DC principles in electronic circuits	3
MCT 111	Select instruments and sensors for measurement	3

MCT 200	Interpret and document technical information	2
	Credit Hours	**22**
Year 2		
Semester 3		
ECT 101	Explore AC electrical circuits	4
ECT 120	Explore combination logics	3
ECT 123	Apply DC and AC machines in engineering	2
ECT 221	Create printed circuit boards	2
ECT 224	Terminate and connect low voltage electrical cables	3
MCT 120	Solve problems in work and energy	5
MCT 201	Apply engineering technology to real or simulated situations to produce technical solutions	4
	Credit Hours	**23**
Semester 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
ECT 223	Explore simulations of electrical circuits	2
MCT 216	Develop knowledge of work organization and management	2
MCT 230	Perform practical training and support in electromechanical based industries	10
	Credit Hours	**25**
	Total Credit Hours	**90**