

HIGHER NITEC IN TECHNOLOGY - ELECTRICAL ENGINEERING

Course Code: HTELE

COURSE OBJECTIVE

This course provides students with broad-based skills and knowledge in electrical engineering to operate, monitor and perform data-driven predictive maintenance of electrical installations in residential, commercial and industrial premises as well as intelligent control systems and renewable energy systems according to engineering specifications, codes of practice and regulations.

COURSE STRUCTURE

S/N	Module Details	Module Code	Module Objectives
C1	Electrical Design and Installation 48 hrs (T) 72 hrs (P) Credits: 7 Prerequisite: Nil	EE4005FP	On completion of the module, students should be able to design, prepare electrical drawings of and maintain electrical installations in residential, industrial and commercial premises in compliance with relevant local standards, regulations and codes of practice.
		Equivalent Codes EE4002FP EE4002FPR	
C2	Electrical Power and Distribution 69 hrs (T) 51 hrs (P) Credits: 7 Prerequisite: Nil	EE4006FP	On completion of the module, students should be able to maintain electrical power and distribution system including switchboards and electrical back up supply system, perform lockout and tag out procedures and remote energy monitoring system in compliance with relevant local standards, regulations and codes of practice.
		Equivalent Codes EE5004FP EE5004FPR	
C3	Motor Control and Drives 72 hrs (T) 48 hrs (P) Credits: 7 Prerequisite: Nil	EE4007FP	On completion of the module, students should be able to maintain electrical motor installations including advanced motor drives and control systems and also implement predictive and condition based maintenance in compliance with relevant local standards, regulations and codes of practice.
		Equivalent Codes EE5002FP EE5002FPR	
C4	Predictive Maintenance and Servicing 30 hrs (T) 90 hrs (P) Credits: 6 Prerequisite: Nil	EE4008FP	On completion of the module, students should be able to maintain various electrical and industrial equipment and appliances, fire alarm system through the application of condition monitoring and data analysis in compliance with relevant local standards, regulations and codes of practice.
		Equivalent Codes EE4001FP EE4001FPR	
C5	Intelligent Building Systems 24 hrs (T) 96 hrs (P) Credits: 6 Prerequisite: Nil	EE5006FP	On completion of the module, students should be able to program and implement smart, internet-linked control and automation solutions for residential and commercial buildings as well as maintain associated digital communication network and cabling system in compliance with relevant local standards, regulations and codes of practice.
		Equivalent Codes EE5001FP EE5001FPR	
C6	Solar Photovoltaic Systems 30 hrs (T) 90 hrs (P) Credits: 5 Prerequisite: Nil	EE5007FP	On completion of the module, students should be able to maintain renewable solar energy systems and implement smart, internet-linked instrumentation and monitoring systems in compliance with relevant local standards, regulations and codes of practice.
		Equivalent Code EE5003FP EE5003FPR	

Abbreviations: T - Theory, P - Practical

CREDITS FOR CERTIFICATION

Total of 38 credits from successful completion of 6 modules.

VENUE

ITE College East, ITE College West

Note:

- 1) Applicant must be free from colour appreciation deficiency.
- 2) The training schedule of lessons is subject to change.
- 3) Depending on the demand, not all the modules in the CET *Higher Nitec* in Technology courses will be offered in each intake. Where the modules are offered and there is insufficient enrolment, the classes will be cancelled and a full refund will be given to the affected students.