

# HIGHER NITEC IN ELECTRICAL ENGINEERING

## Core Modules

### Electrical Design and Installation

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.

### Electrical Power and Distribution

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.

### Motor Control and Drives

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.

### Predictive Maintenance and Servicing

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.

### Intelligent Building Systems

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.

### Solar Photovoltaic Systems

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.

### Industry Attachment

Students will be attached to relevant companies to complement and reinforce the skills and knowledge acquired at ITE and to gain professional and working experience.