WORK-STUDY DIPLOMA IN ELECTRICAL ENGINEERING

MODULE OBJECTIVES

Module 1: Electrotechnology
On completion of the module, trainees should be able to analyse, connect and test DC and AC circuits, electromagnetic circuits and electrical machines.

Module 2: Industrial Electronic Application
On completion of the module, trainees should be able to design and install logic control system as well as to maintain electronic circuits and power converters.

Module 3: Electrical Design and Installation
On completion of the module, trainees should be able to design and produce electrical drawings for domestic, commercial, and install, test and maintain electrical installations in compliance with the relevant current codes of practice and statutory regulations.

Module 4: Circuit Analysis
On completion of the module, trainees should be able to determine electrical quantities as well as to apply the concepts and theorems in circuit analysis for three-phase systems.

Module 5: Electrical Motor and Control System
On completion of the module, trainees should be able to design, install and maintain electrical motor and drive systems.

Module 6: Power Distribution System
On completion of the module, trainees should be able to design, install and maintain major electrical equipment and its associated protective devices in the power distribution system, in compliance with the relevant current codes of practices and statutory regulations.

Module 7: Power System Analysis
On completion of the module, trainees should be able to manage power system operation and mitigate power quality issues.

Module 8: Solar Photovoltaic System and Electric Vehicle Charger
On completion of the module, trainees should be able to design, install and maintain PV system. They should also be able to maintain electric vehicle charging infrastructures.

Module 9: 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.

Module 10: On-the-Job Training

On completion of the module, trainees should be able to apply the skills and knowledge acquired at ITE College and workplace to take on the full job scope, including supervisory function where appropriate, at the company.

OJT LIST OF COMPETENCIES

Course Title: Electrical Engineering **Level:** Work-Study Diploma

S/n	List of Competencies (Standard)
1.	Install electrical machine circuits
2.	Troubleshoot electrical faults
3.	Install logic control system
4.	Maintain power conversion system
5.	Produce electrical installation design drawing
6.	Perform electrical installation
7.	Maintain electrical installation
8.	Inspect electrical quantities
9.	Manage electrical loading
10.	Design motor and control system
11.	Install motor and control system
12.	Maintain motor and control system
13.	Design electrical distribution system
14.	Install electrical distribution system
15.	Maintain electrical distribution system
16.	Maintain power system operation
17.	Manage power quality
18.	Design solar photovoltaic system
19.	Install solar photovoltaic system
20.	Maintain solar photovoltaic system
21.	Maintain electric vehicle charger