

# Electrical Installation and Machine Maintenance

Code: EIMM

Duration: 16 Hours

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## Synopsis:

This course is designed to provide learners with the knowledge on electrical installation and the maintenance of electrical motor starters and control circuits.

## Course Objective:

On completion of this course, learners will be able to:

- Install electric cabling and wiring systems
- Inspect and test completed electrical installations
- Perform the maintenance and troubleshooting on electrical motor starters and control circuits

## Course Outline:

This course will cover:

- Wire and test a control circuit for DOL starting of a three phase induction motor
- Wire and test a control circuit for a star-delta starter
- Test the operation of a Telemecanique ATS 01N206QN soft starter with a 3-phase induction motor
- Safe Working Procedures in Electrical Lab
- Electrical Standards, Regulations and Codes of Practice
- Electric Cables including New Cable Colour Code
- Transformer
- Three-Phase Induction Motors
- Motor Starters
- Test Equipment and Instruments
- Troubleshooting Common Faults a Motor

## For Whom:

Suitable for personnel from vocations other than electrical and electronic engineering, people who are involved in quality inspection or technical product applications as well as those who wish to upgrade their knowledge and skills.

**Entry Requirements:**

Participants are assumed to:

- Be able to listen and speak English at a proficiency level equivalent to the Employability Skills System (ESS) level 4 and above;
- Be able to read and write English at a proficiency level equivalent to ESS level 4 and above; and
- Be able to manipulate numbers at a proficiency level equivalent to ESS level 4 and above.

**Training Medium:**

This course is conducted in English.

**Training Methodology:**

This course is delivered through mini-lectures, discussions, demonstration and hands-on practices.

**Assessment Methodology:**

A written test is conducted at the end of the course.

**Certification:**

A Certificate of Proficiency will be awarded to trainees upon completing and passing the test. Otherwise, a Certificate of Participation will be issued to those who attained a minimum attendance of 75%.