

Electrical Technician (Level 1)

Course Syllabus



1. Description

This course is intended for Operation and Maintenance personnel who will be working on electrical systems in Oil & Gas Production equipment and facilities. The purpose of this training course is to point out the electrical shock hazards that exist in industrial facilities and to describe the precautions that are necessary to keep electrical work safe maintenance work, a basic understanding of the operation of batteries and chargers, The students will learn how to use electrical testers and meters, how to read electrical diagrams. They can explain how to select and calculate the standards of electrical cables and conductors. They will be able to perform preventive and corrective maintenance on AC Power Generators and Three phase AC Induction Motors and they know how to troubleshooting, configuration of Solar Cell Power System. They will have skill to work with electrical conduits and tools.

2. Objectives

- ❖ To learn the basic overviews of electrical systems and electrical equipment typically used in the Oil and Gas Production Plant.
- ❖ To be able to use electrical tools, operate and maintain specific equipment in the Oil and Gas Production Plant
- ❖ To be able to perform corrective and preventive maintenance in electrical tasks.
- ❖ To understand and are able to work on electrical systems safely and efficiently.

3. Materials

- a) Electrical training manuals
- b) Slide Presentations
- c) VDO's training
- d) Electrical tools and test equipment as related to each topic

- e) Specific machines and engines related to each topic
- f) All materials are in the English language.

4. Class size

4 – 15 trainees.

5. Language

- Presented by Thai instructors
- Training Manuals and VDOs in English.
- Quizzes and Trainee Reports in English.

6. Who should attend:

- Electrical Technicians who are new for Oil & Gas fields
- Apprentice Engineers
- Should passed TOEIC at least 350

7. Course Outline: Electrical Technician(Level1) course is comprised of 7 packages ,each package take 2 – 3 days as :

Duration	Course Code	Class Presentation	Teaching Aids, Practices
1 day	OG-P-TH02	<ul style="list-style-type: none"> • Basic Principle Of Petroleum 	<ul style="list-style-type: none"> • Manuals • VDO Summary • Quiz
1 day	OG-P-TH02	<ul style="list-style-type: none"> • Overview of Oil and Gas Processing 	<ul style="list-style-type: none"> • Manuals • VDO Summary • Quiz
1 day	OG –P-TH02	<ul style="list-style-type: none"> • Wellhead Platform and Equipment 	<ul style="list-style-type: none"> • Manuals • VDO Summary • Quiz
2 days	OG-E-TH01	<ul style="list-style-type: none"> • Introduction to Instrumentation 	<ul style="list-style-type: none"> • Manuals • VDO Summary • Quiz
1 day	OG-E-TH01	<ul style="list-style-type: none"> • P & ID Drawing 	<ul style="list-style-type: none"> • Manuals • VDO Summary • Quiz

2 days	OG-E-TH02	<ul style="list-style-type: none"> • Introduction to Distributed Control System (DCS) 	<ul style="list-style-type: none"> • Manuals • Hands On Training • VDO Summary • Quiz
1 day	OG-E-TH02	<ul style="list-style-type: none"> • Safety in Electrical Maintenance 	<ul style="list-style-type: none"> • Manuals • VDO Summary • Quiz
1 day	OG-E-TH03	<ul style="list-style-type: none"> • Batteries and Chargers 	<ul style="list-style-type: none"> • Manuals • VDO Summary • Quiz
1 day	OG-E-TH03	<ul style="list-style-type: none"> • Reading Electrical Diagrams 	<ul style="list-style-type: none"> • Electrical Diagrams Trace • VDO Summary • Quiz
1 day	OG-E-TH03	<ul style="list-style-type: none"> • Cables and Conductors: Terminations and Splices 	<ul style="list-style-type: none"> • Manuals • Hands On Training • VDO Summary • Quiz
1 day	OG-E-TH04	<ul style="list-style-type: none"> • Motor Branch Circuit Protections 	<ul style="list-style-type: none"> • Manuals • Equipment Demon. • VDO Summary • Quiz
2 days	OG-E-TH04	<ul style="list-style-type: none"> • Three Phase AC Induction Motors 	<ul style="list-style-type: none"> • Manuals • Hands On Training • VDO Summary • Quiz
2 days	OG-E-TH05	<ul style="list-style-type: none"> • AC Generator Maintenance 	<ul style="list-style-type: none"> • Manuals • Hands On Training • Quiz
2 days	OG-I-TH01	<ul style="list-style-type: none"> • Fire & Gas Detection and Safety Systems and SIS 	<ul style="list-style-type: none"> • Equipment Demo • Slide Presentation • Quiz

7. Class duration

- 1 day = 7 hours.
- *Total class - days = 19 days
- *Total class – hours = 19 x 7 = 133hours.

8. Assessment

- Quiz for each module 40 %
- Post Test 60%



Each trainee must meet

70% above.

9. Certificate

- Each package will be provided by MOGIT
- Completion of all packages, the certificate will be distributed and accredited as Electrical Technician, Level 1.

10. Training fee:

Note:

Including : lunch, training manuals, training material, consumables and certificates.

Excluding: Accommodation and VAT.

11. Option :

- * Clients can separately select and learn each package as their requirement.
 - * Clients can add more subjects as their requirement.
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