

ADVANCED CERTIFICATE IN OIL AND GAS OFFSHORE PRODUCTION OPERATIONS TRAINING PROGRAM (OPOT)

I. OVERVIEW

The **Advanced Certificate In Oil And Gas Land Based Production Operations Training Programme (OPOT)** focuses developing entry level competencies for the upstream oil and gas operations for persons who already have a technician's qualification.

II. ENTRY REQUIREMENTS

To gain entry into this programme the candidate is required to have:

Five (5) CXC subjects, inclusive of Mathematics and Science (Chemistry, Physics or Integrated Science) and a postsecondary Technician's Diploma from an approved postsecondary education.

AND

Technical qualifications in either:

City and Guild Level III IVQ Advanced Diploma in Oil and Gas

or

(Kenson) Diploma in Oil and Gas

or

A recognised Technician's Diploma in one of the following qualifications:

- Mechanical engineering
- Electrical and Electronic engineering
- Industrial Instrumentation engineering

or

A Journeyman's Certificate awarded by MIC

or

A Degree awarded by a recognised Institution

III. AIM

OPOT focuses on developing an individual to work as an entry level operator. This programme reduces the learning curve for new operators and equips the candidate with all the basic tools so he / she can function efficiently once acquiring employment. This qualification is meant to support upstream operations in Trinidad and Tobago and ensure that each graduate can troubleshoot, analyze and support upstream operations in any assigned company.

IV. COURSE CONTENT

Some of the units to be delivered include:

- **Introduction to Oil and Gas Drilling and Exploration**

Completion of this unit proves the student is able to: discuss the history of hydrocarbon usage by man, and the formation and composition of hydrocarbons, discuss different systems used in evaluating the possibility of the existence of hydrocarbons in an area, and the preparations required to make drilling a reality, discuss and explain how a decision to drill is made, the role of the Drilling Program, types of drilling rigs used, the steps in drilling a well and the equipment used to safely drill a well.

- **Safe Systems of Work**

Completion of this unit provides the student with understanding of the application and use of a Safe System of Work and supporting tools for its implementation and maintenance. Additionally, students would have a working knowledge of the risk assessment and Permit to Work Process.

- **Well Deck**

On completion of this unit some areas of competence are as follows:

- a. Understand the function of the SCSSV and identify different types of SCSSV.
- b. Know the procedure for Opening, Closing and Testing the SCSSV.
- c. Understand the function of the Christmas tree.

- **Separation Deck**

On completion of this unit some areas of competence are as follows:

- a. Define “separator” and explain the design and function of the separator.
- b. Understand the different sections of the separator and the role of each section in the separation process.
- c. Identify different types of separators, their applications, and discuss how stable separator level controls are achieved.

- **Process Control**

On completion of this unit some areas of competence are as follows:

- a. Understand the definition of Process Control.
- b. Know the difference between Manual and Automatic Process Control.
- c. Discuss and explain the main factors and elements of Process Control.
- d. Identify the different types of Process Control Systems.

- **Pipes, Valves and Fittings**

On completion of this unit some areas of competence are as follows:

- a. Understand the design and operation of a variety of valves.
- b. Understand how proper maintenance procedures increase the life span of the valves.

- **Major Equipment**

On completion of this unit some areas of competence are as follows:

- a. Understand the design and function of reciprocating piston engines.
- b. Determine the issues related to reciprocating piston engines.
- c. Know critical systems, engine protection and safety systems.

- **Role of the Production Operator**

Completion of this unit proves the student is able to explain in detail, the various roles and responsibilities for an offshore operator, competently explain and produce a production report.

V. INSTRUCTIONAL TECHNIQUES

The Advanced Certificate In Oil And Gas Offshore Production Operations Training Programme (OPPT) will be delivered using blended modalities. The following teaching strategies will be used to promote individual and group-based learning: case studies, collaborative learning activities, debates, group-based online discussions, group projects, individual assignments, individual projects, lectures, reading and research, presentations and weekly discussions.

V1. ASSESSMENT METHODS

All units will be assessed through a combination of demonstration of practical skills, product evidence, simulations, projects, observation, and written examinations.