



# **High-Tech Post Graduate Diploma in Exploration, Drilling & Well Maintenance Training – 2023**

### **SYLLABUS OUTLINE**

- Introduction to General Exploration and Drilling
- Drilling process overview
- Language of drilling, completing, and well intervention
- Drill string components: bits and accessories
- Drilling fluids and hydraulics
- Cores and coring
- Electric logging, MWD, LWD
- Casing design and installation
- Primary and remedial cementing
- Directional, horizontal, multilateral and under-balanced drilling
- Hole problems, stuck pipe, side-tracking and fishing
- Reservoir and Wellheads
- The Oil and Gas Process
- Utility Systems

### Operations & Maintenance

- Pumps
- Compressors
- Distillation
- Electrical Equipment
- Mechanical Equipment
- Valves
- Separators

## **Training Objectives**

#### What are the Goals?

By the end of this training course, participants will learn and have an understanding of:





- The background to, and importance of, the oil and gas indust.
- The wide range of professional disciplines involved in the industry
- The science behind the formation of oil and gas deposits
- The exploration strategy and follow the standard exploration workflow,
- The most common exploration techniques, via a multidisciplinary approach and data integration.
- How oil and gas assets (reservoirs) are discovered and developed
- The facilities and processing required to drill.
- The nature and maintenance of wells.
- How to visualize what is happening downhole, discover what can be accomplished, and learn how drilling and completion can alter reservoir performance.
- To communicate with drilling and production personnel. No experience or prerequisites are required.



