Oil & Gas Industry Courses

Upstream

Exploration

Geology

- Operation Geology Techniques and Arts and Geo-Management
- Advanced Structural Geology & Fault Seal
- Sequence Stratigraphy
- Reservoir Characterization
- Development Geology for Petroleum System
- Fault Seal Analysis in Exploration
- Borehole Image Interpretation
- Basin Analysis
- Structural Styles, Validation and Restoration
- Brown Fields Re-Interpretation
- Clastic Depositional Systems
- Carbonate Depositional Systems
- Industrial Biostratigraphy
- Play Fairway Analysis and Prospecting in the Exploration Phase
- Seismic Interpretation and Application of Structural Geology

Geophysics

- Basic Seismic Data Processing
- Seismic Data Interpretation
- Seismic Attributes & AVO Analysis
- Seismic to Well Tie
- Velocity Model Building for Depth Conversion

Petro-Physics

- Basic Openhole Logging and formation Evaluation
- Advanced Formation Evaluation and Petro-physics
- Integrated Carbonate Petro-physics
- Well Integrity-Cased Hole Logging and Monitoring

G&G Application Based Training

- 3D Reservoir Modeling
- Petrel - Property Modeling
- Petrel Geology

Petroleum Engineering

Reservoir Engineering

- Advanced Reservoir Engineering
- Reservoir Fluid Properties & EOS Modeling
- Water-Flooding
- Reserve Evaluation
- Unconventional Resources Recovery
- Enhanced Oil Recovery (EOR)
- Reservoir Management
- SCAL Theories & Applications in Reservoir Engineering
- Risk & Uncertainty in Petroleum Industry
- Petroleum Economics
- 3D Reservoir Modeling
- Petrel - Reservoir Engineering
- Gas Reservoir Management
- Reservoir Simulation Strategies
- Unconventional Reservoir Properties Fundamental
- Integrated Reservoir modeling
- Reservoir Management for unconventional Reservoirs
- History Matching and Reservoir optimization
- Reservoir Material Balance Fundamentals
- Water flooding
- Enhanced Oil Recovery with Gas Injection EORG
- Well Test Design and Analysis WTA
- Reservoir Rock Properties Core

- Reservoir Fluid Properties Core
- Capillarity in Rocks CIR
- Flow in porous media

Drilling Engineering

- Primary & Remedial Cementing Operations, Casing Hardware.
- Horizontal and Directional Drilling
- Drilling Management and Optimization
- Advanced Drilling & Completion Fluids
- Well Completion and Workover Procedures
- Subsea Completion Operations
- Deep water Drilling Design and Operation
- Intelligent Completion
- Well Integrity Management System
- Solid Control Equipment for Drilling Personnel
- Surface Well Testing Operations
- Drilling Services Tendering & Contracts Process
- Underbalanced Drilling
- Drill Bits

Production Engineering

- Surface Field Production Engineering
- Cased-Hole Logging
- Production Problem Solving
- Integrated Production Optimization using NODAL Analysis
- Beam Pump "Sucker Rod" (Design, Implementation and Troubleshooting)
- Artificial Lift Technology
- ESP (Design, Implementation and Troubleshooting)
- Gas Lifting (Design and Implementation)
- Formation Damage (Evaluation and Control Strategies)
- Well Integrity Management System (Throughout the Well Life Cycle)

Production Technology

- Basic Wireline Operations
- Advanced Wireline Operations
- Wellhead Operation and Maintenance
- Hydraulic Fracturing
- Coiled Tubing
- Well Stimulation
- Well Production Technology
- Formation Damage (Evaluation and Control Strategies)
- Perforation Technology
- Well Integrity Management System (Throughout the Well Life Cycle)

Midstream

Pipeline and piping systems

- Pipeline Design, Construction, Inspection & Maintenance
- Pipeline and Piping System Inspection and Troubleshooting
- Piping stress analysis by Caesar
- Flow Assurance "Fundamentals"
- OLGA Flow Assurance using Software
- Oil & Gas , Storage and Transportation

Materials, corrosion and Inspection

- Material Selection For Oil & Gas Applications
- Metallic and Non - Metallic Material
- Corrosion inspection, Monitoring and Corrosion Control in Petroleum Applications
- Cathodic Protection Technology
- Coating and Painting Technology (Containing One Day Practical)
- Pipeline Corrosion (Internal & External)
- Corrosion Inhibitors
- Introduction to ASME code
- ASME "PCC-2"
- ASME "BPVC-VIII-1"
- Heat Treatment

Welding

- Welding Technology For Basic Welding Process

- Plastic Welding Inspection
- Arc Welding
- Co2 Shielded Arc Welding
- Oxy-Acetylene Welding (Basic)
- Oxy-Acetylene Welding (Advanced)
- Argon Shielded Arc Welding
- Welding inspection: Radiology
- Welding inspection: Ultrasound waves
- Welding inspection: Magnetic waves
- Welding inspection: Dye penetrant
- Welding inspection: Visual examination

Downstream

Oil & Gas Process Technologies & Operations

- Steady State Basic Process Modelling using ASPEN HYSYS
- Dynamic Modeling and Advanced Process Modeling using Aspen HYSYS
- Flare Network Design & Rating using ASPEN HYSYS
- Heat Exchangers Modeling Using the Exchanger Design and Rating Suite (EDR)
- Introduction to energy optimization using ASPEN utilities planner
- DCS Simulator for Process Panel operation
- Basic design steps for Industrial plants up to the safe operation
- Introduction to Oil & gas operations
- precommissioning, commissioning and start-up activities for process plant
- Natural Gas production and processing facilities
- Natural gas Plant startup, shutdown, troubleshooting and special problems (Advanced)
- crude oil surface production and treatment facilities
- Heat Transfer Equipment , Commissioning, Startup, Operation and Shutdown
- Oil Movement, Storage tank measurements, Shipping & troubleshooting
- process control for process engineers
- Pressure Relieving System Components, Design, Commissioning, Startup, Troubleshooting and Shutdown
- Oil & Gas Process Equipment Operation
- Chemical treatment in oil & gas field
- Water treatment and Effluent Waste water treatment facilities
- Oil & Gas Process Technologies & Operations (laboratory)
- Laboratory Quality Management
- Lab Safety, Hazards, Risk Assessment and COSHH
- ASTM Test Method (How to read, understand and implement)
- Gas Chromatography and Gas Sampling (practical)
- Crude oil analysis and sampling (practical)
- water and waste water treatment analysis (practical)
- Mercury: Detection, Analysis, and Speciation in Oil, Gas, and Water (Practical)
- Fundamentals of Natural gas Analysis and processing (practical)
- Lubricant oil Analysis (practical)
- "Oil field Microbiology
- Examination method for Corrosive Bacteria in the oil field (Practical)"
- Sulphur: Chemistry, Analysis, and Distribution in Oil, Gas, and water (practical)

Mechanical Engineering

Maintenance & Reliability and Asset Management

- Maintenance Management
- Computerized Maintenance Management System (CMMS)
- Maintenance Planning & Scheduling & Work Control
- Root Cause Analysis and Root Cause Failure Analysis (RCA&RCFA)

- Reliability, Availability, Maintainability and Safety (RAMs)
- Reliability Centered Maintenance (RCM)
- Shutdown and Turnaround Planning
- Asset Integrity Management System

Condition Based Monitoring (CBM)

- Introduction to Machinery Vibration
- Basic Machinery Vibration
- Machinery Vibration Analysis
- Machinery Lubrication Analysis
- Balancing of Rotating Machinery
- Thermal Imaging
- Ultrasound

Rotating and Static Equipment

- Centrifugal and Positive Displacement Pumps
- Gas Compressors
- Gas Turbine Basis
- Gas Turbine Operation
- Gas Turbine Protective Systems
- Gas Turbine Control Systems
- Operation of combined cycle power plant
- Gas Turbine maintenance
- Diesel Engine Operation & Maintenance
- Gear Box Operation, Maintenance and Overhaul
- Basic Bearing Technology & Maintenenace
- Advanced Bearing Technology & Maintenance
- Shaft Alignment
- Mechanical Seals for Rotating Equipments
- Valve Types
- Air Conditioning & Refrigeration
- Principles of Refrigeration Systems and Air Conditioning
- Maintenance of Refrigeration Systems and Air Conditioners sets
- Maintenance of Refrigeration and Air Conditioners
- Central Air Conditioning
- Fire Fighting systems Design in Administrative buildings

Hydraulic and Pneumatic Systems

- Basic Principals Of Hydraulic Systems (BPHS)
- Advanced Hydraulic Systems (AHS)
- Electro Hydraulic Control Systems (ELHS)
- Maintenance And Fault Analysis Of Hydraulic Systems (MFHS)
- Design And Manufacturing Of Hydraulic Systems (DMHS)
- Basic Principals Of Pneumatic Systems (BPPS)

Electrical engineering and Maintenance

Electrical Power Generation and Distribution

- Proses Operation and (P&ID) for instrument & Electrical Engineer
- Power Generation System
- Modern power management and smart system (PMS)
- Electrical Power Transformers
- Power Cables and Overhead Transmission Lines
- Switchgear & Circuit breakers
- Uninterruptible Power Supply (UPS)

Electrical Equipment and Loads

- Electrical Submersible Pumps (ESP)
- Variable speed Drive VSD
- Electrical Motor
- Electrical Equipment Installation, Commissioning and startup
- Electrical Equipment Design, specification, Drawings and Schemes
- Electrical / Instrumentation Installation In hazard area and EX Equipment

Electrical power system protection and quality

- Advanced power system protection ,smart relays and fault analysis
- Electrical system earthing and lightning arrestor
- Power system Quality, harmonic effect and power factor correction

- Low and medium Voltage Electrical Isolation and safety work procedure

Instrumentation Engineering & Control Systems

- Process Operation and (P&ID) for Instrument and Electrical Engineers
- Instrumentation and Control Fundamentals
- Pressure, Level and Temperature Transmitters
- Flow meters and flow computers
- Advanced Instrumentation
- Flow/Level Custody transfer and Tank Gauging
- Control Valves
- Safety Releif Valve
- Electrical / Instrumentation Installation In hazard area and EX Equipment
- Instrumentation Work Shop
- Process Control Techniques
- PLC Fundamentals for process control
- Advanced PLC (Internal Design and Operation)
- Distributed Control Systems DCS
- Supervisory Control and Data Acquisition (SCADA) System
- Control System communication protocols and Foundation Field Bus
- Fiber Optic Networks
- Safety Instrumented Systems (SIS) design and application
- Fire and Gas protection system (Detectors and alarm System)
- Subsea control system
- Pipeline and Terminal Automation
- Allan Bradely Control System Programs
- Siemens Control System Programs