OTHER PETEX COURSES

Advanced Petroleum Measurement
Basic Petroleum Measurement
Electrical Maintenance Fundamentals
Electrical Maintenance—Equipment and Application
Elementary Drilling
Elementary Electronics for Nonelectrical Personnel
Engine and Compressor Operations
Field Handling and Plant Processing of Natural Gas
Gauging, Testing, and Running of Lease Tanks
Hydraulics for Pipeline Engineers
Hydraulics for Pipeline Operators
Instruments and Controls
Introduction to Offshore Operations
Introduction to Programmable Logic Controllers
LNG: Basics of Liquefied Natural Gas
Mass Measurement of Hydrocarbon Fluids
Natural Gas Measurement—Design/Application/Inspection
Natural Gas Measurement—Electronic Flow Measurement
Natural Gas Measurement—Fundamentals
Natural Gas Measurement—Sampling and Analysis
Petroleum Fundamentals
Petroleum Industry Fundamentals for Accountants
Petroleum Industry Fundamentals for Insurers
Pipeline Technology
Reciprocating Compressor/Prime Mover Operations
Supervisory Control and Data Acquisition Systems (SCADA)
Valves and Actuators (Operation and Maintenance)

Enrollment Information
Your company is invited to participate in these training programs. For additional information, contact—

PETEX
Houston Training Center
The University of Texas
2700 W. W. Thorne Blvd.
Houston, TX 77073
Tel: 800.687.7052
or 281.443.7144
FAX: 281.443.8722
Email: petexhtc@www.utexas.edu

For more info about PETEX, check out our Web site at www.utexas.edu/ce/petex
**Production Technology**

7.1 CEUs

Length: 9½ days or Subsurface: 5 days (3.8 CEUs)
Surface: 4½ days (3.3 CEUs)

**1st Week—Subsurface**

**RESERVOIR FUNDAMENTALS**
- Reservoir rock characteristics
- Reservoir fluids
- Fluid flow

**NATURAL DRIVE MECHANISMS**
- Water drive
- Dissolved gas drive

**ARTIFICIAL LIFT MECHANISMS**
- Artificial lift methods
- Artificial lift selection criteria
- Electric submersible pumps
- Sucker rod pumping

**WELLHEAD EQUIPMENT**
- Equipment overview
- Equipment types

**ENHANCED RECOVERY**
- Well performance and surveillance
- Secondary recovery
- Waterflood

**OFFSHORE PRODUCTION—SPECIAL CONSIDERATIONS**

**2nd Week—Surface**

**SEPARATION**
- Multi-phase fluids
- Separating gas and liquids

**TREATING LIQUIDS**
- Liquid dehydration
- Free water knockout

**TREATING GAS**
- Dehydration
- Gas treating

**MEASURING LIQUIDS AND GASES**
- Measuring liquids
- Gas measurement

**PRODUCED WATER MANAGEMENT AND DISPOSAL**
- Types of equipment
- Human/machine interface
- Master
- Communications
- RTU

**LEASE AUTOMATION AND EMERGENCY SHUTDOWN**
- Types of equipment
- End devices
- SCADA system
- Types of ESD systems
- Maintenance and safety considerations

**PRODUCED WATER MANAGEMENT AND DISPOSAL**

**PLANNING THE JOB**
- Rotary vs service rig
- Equipment checklist

**PIPE RECOVERY**
- Freepoint backoff operations

**FISHING**
- Loose junk
- Wireline fishing

**WIRELINE OPERATIONS**
- Surface equipment

**WELL LOGGING**
- Open-hole logging
- Fluids

**SELECTION OF DOWNHOLE EQUIPMENT**
- Packers
- Seal assemblies
- Landing nipples

**SOLVENT AND CHEMICAL TREATING, SCALE AND PARAFFIN REMOVAL AND CONTROL**
- Types of solvents, acids, and scale deposits
- Applications and restrictions

**SAND CONTROL**
- Gravel pack

**COMPLETION FLUID**
- Safety & environmental considerations
- Fluids
- Guidelines & issues
- Brine economics

**CASING AND TUBING**
- Selection and use of casing, tubing, and drill pipe
- String design considerations

**Completion and Workover**

7.1 CEUs

Length: 9½ days or 1st Week: 5 days (3.8 CEUs)
2nd Week: 4½ days (3.3 CEUs)

**PLANNING THE JOB**
- Logistics—scheduling

**PIPE RECOVERY**
- Jet cutter operation
- Chemical cutter operations

**FISHING**
- Specialized tools

**WIRELINE OPERATIONS**
- Wireline tools

**WELL LOGGING**
- Collar logs
- Cement bond logs

**SELECTION OF DOWNHOLE EQUIPMENT**
- Preparation for future downhole work

**SOLVENT AND CHEMICAL TREATING, SCALE AND PARAFFIN REMOVAL AND CONTROL**
- Formation damage
- Safety consideration

**SAND CONTROL**
- Screen and liner

**COMPLETION FLUID**
- Fluid loss control
- Material/selection
- Displacements
- Mass balance

**CASING AND TUBING**
- Selection and use of casing, tubing, and drill pipe
- String design considerations

**Completion and Workover, cont.**

**PERFORATING**
- Casing
- Down tubing
- Unbalanced
- Jet vs fluid

**FRACTURING**
- Purpose of fracturing
- Mini-fracturing
- Fracturing fluids selection
- Plug cementing
- Squeeze cementing
- Cement durability

**PRIMARY CEMENTING AND SQUEEZING**
- Mud displacement
- Bond logging
- Cement and additives
- Frictional forces
- Bond durability

**SIDETRACKING**
- Drill out below casing
- Cut window and sidetrack
- Safety considerations

**LINERS**
- Applications
- Liner hangers
- Running liner in well
- Hanger safety

**PRIMARY TESTING**
- Four point
- Bottomhole samples
- Bottom pressure buildup test
- Swab test

**EVALUATION OF TESTS**
- Absolute open flow
- Gas and oil analysis
- Laminar flow
- H₂S analysis
- GOR determination

**ACCIDENT PREVENTION**

**Recommended For**
Technicians, foremen, production operators, and workover personnel

Need on-site training?
These courses can be customized to meet your company's needs.
For more information please call 281.443.7144.