#### **New Blended Learning Course**

#### Pipeline Construction Inspection Course Based on API RP 1169

#### 6 CEUs

**Length** 7 weeks (includes 5 days at the Houston Training Center for the instructor-led portion)

Comprehensive course that provides you with the knowledge that owner/operators expect from pipeline inspectors and prepares you for the Pipeline Inspector's Certification Exam API RP 1169 administered by the American Petroleum Institute (API). The course is delivered in a blended format, combining flexible online learning and in-depth face-to-face classroom instruction.

#### **Course Content**

The course is developed around the API RP 1169, and covers all the relevant topics, including:

- Safety (OSHA) and environmental requirements
- Owner/operator and regulatory requirements for pipeline construction processes; landowner requests
- Construction inspector responsibilities
- Operator Qualification (OQ) requirements
- Survey concepts

#### **Recommended For**

Individuals with the experience and education listed on the API's 1169 exam qualification requirements found at www.api.org. Familiarity with the API RP 1169 is recommended.

#### Included with Course

- Access to multimedia online learning modules to complete at your own pace prior to the class
- 5 days of instructor-led training delivered by industry professionals, providing real-world owner/ operator specifications and a discussion of issues. The class includes:
  - ♦ Catered lunch daily; beverages and snacks provided
  - ♦ Course materials including instructor presentations
- Online access to course materials, the exam, and instructors' answers to your questions for a limited time after the class ends

For more info, check out petex.utexas.edu/courses/ pipelineconstructioninspection/

#### **OTHER PETEX COURSES**

Completion and Workover

Elementary Drilling—Onshore Elementary Drilling—Offshore

Fundamentals of Petroleum Measurement Intermediate Petroleum Measurement Advanced Petroleum Measurement

LNG: Basics of Liquefied Natural Gas

Mass Measurement of Hydrocarbon Fluids

Natural Gas Measurement—Fundamentals and Meter Station Design/Application/Inspection Natural Gas Measurement—Electronic Flow Measurement Natural Gas Measurement—Sampling and Analysis

Petroleum Fundamentals

The Rig School<sup>™</sup>—Introduction to Offshore Operations

Valves and Actuators—*Operation and Maintenance* ValvePro<sup>®</sup> Certified Valve Maintenance Technician

Additional Custom Courses and seminars also available

#### **Enrollment Information**

For additional information, contact-

PETEX Houston Training Center The University of Texas at Austin 4702 North Sam Houston Parkway West, Suite 800 Houston, TX 77086 Tel: 800.687.7052 or 281.397.2440 FAX: 281.397.2441 Email: htc@www.utexas.edu PETEX Instructor-Led Training

# **Pipeline Courses**

- Pipeline Construction Inspection
- Pipeline Technology
- Hydraulics for Pipeline Engineers



petex.utexas.edu

January, 2016

### **PETEX Instructor-Led Pipeline Courses**

#### **Pipeline Technology**

10.9 CEUs, 30 CEs for Texas Landmen

Length: 14.5 Days or 3 weeks (may be taken in one-week individual modules)

Covers pipeline design, construction, operations, maintenance, and management. May be taken in one-week modules.

#### **Course Content**

#### 1st Week—Pipeline Design (3.8 CEUs, 5 days)

- Pipeline regulations
- Pipeline rights-of-way and contracts
- Electric prime movers
- Pipeline hydraulics
- Analysis and control of surges
- Mainline design and construction
- Station design and construction
- Selection of pipeline pumps

#### 2nd Week—Operations (3.8 CEUs, 5 days)

- Product terminals
- Supervisory control systems
- Drag reducing agents
- Meters and measurement
- Power optimization
- Economics of pipeline transportation
- Mainline tanks
- Mainline materials of construction

#### 3rd Week—Maintenance (3.3 CEUs, 4.5 days)

- Line maintenance
- Corrosion
- Maintenance equipment
- Leak detection
- components of automatic controls
- Valve maintenance
- Welding
- Emergency response



#### Pipeline Technology, cont.

#### **Recommended For**

Engineers new to the pipeline industry or those in special areas seeking a broader view of pipeline operations. Also serves as a refresher course for pipeline engineers.

**Recommended Books** (50% discount when purchased during course): A *Dictionary for the Oil and Gas Industry*, 2nd ed.

#### Included with Course

- Catered lunch daily; beverages and snacks provided
- Industry field trip
- Course materials including instructor presentations for each session attended
- Use of scientific calculator and measurement tools

#### **Recommended Book**

## A Dictionary for the Oil and Gas Industry, 2nd ed.

A best-selling resource for all industry personnel. This helpful reference contains over 12,000 definitions of terms used in petroleum geology, exploration, drilling, production, pipelining, processing, refining, accounting, and marketing. Features over 540

2-color illustrations and an easy-to-use format. Also includes contact information for industry associations and key government agencies and lists of common abbreviations, SI units, and metric equivalents. 2011, 336 pp.

#### Hydraulics for Pipeline Engineers

This course may assist in meeting requirements for DOT Operator Certification.

#### 2.7 CEUs

#### Length: 3.5 Days

Covers basic pipeline hydraulics for engineers and design problems to include calculations for hydraulic gradients, pipe selection, telescoping, grade tapering, injection, and stripping. Discusses equipment and methods of surge control.

Participants should plan on bringing a laptop or tablet capable of running Excel or an equivalent spreadsheet App with the ability to do advanced math functions.

#### Course Content

- Introduction to pipeline hydraulics
- Fluid characteristics and pipeline design codes
- Basic hydraulics equations and friction loss equations
- Energy and surge considerations and system control
- Hydraulic gradient
- Pipe selection and pumps
- Pipeline economics

#### **Recommended For**

Engineers new to the pipeline industry or those seeking practical knowledge. Also for electrical and civil engineers working on pipelines. Participants must be able to perform engineering-level computations.

#### **Included with Course**

- Catered lunch daily; beverages and snacks provided
- Course materials including instructor presentations
- Use of scientific calculator and measurement tools
- Provided books: Cameron Hydraulic Data and Crane Technical Paper 410

