PetroSkills

Offshore Pipeline Design and Construction - PL-43

COURSE

About the Course

This intensive 5-day foundation level course covers the principal aspects of design, construction, and operations of offshore pipeline systems. The course focuses on pipeline mechanical, strength, and stability design, and construction. Special challenges, such as shoreline crossings, foreign pipeline crossings, repair methods, flow assurance, corrosion control and cathodic protection are an integral part of this course. Participants will acquire the essential knowledge and skills to design, construct, and operate pipelines. Design problems and team projects are part of this course.

"Overall I felt the course was very good. Liked the personal stories the instructor used to illustrate various aspects of the course." - Policy Coordinator, United States

Target Audience

Engineers, designers and operators who are actively involved in the design, specification, construction, and operation of offshore pipeline systems.

You Will Learn

Participants will learn how to:

- Apply mechanical, strength, and physical principles to pipeline design, material selection, construction, and operation
- Describe the key construction methods
- Define the importance of environmental conditions, construction methods, and pipeline system hydraulics in design, installation, and operations of offshore pipeline systems
- Identify special design and construction challenges of offshore pipeline systems
- Incorporate construction methods into the design of a pipeline system
- Identify the principal interfaces of pipeline facilities, such as platforms, floating production systems, sub-sea wellheads, and SPMs on design, construction, and operations of offshore pipeline systems
- Identify offshore safety and environmental practices and their effect on design, construction, and operations

Course Content

- Overview of oil and gas transportation systems
- Review pipeline hydraulics, focusing on those aspects that affect design, construction, and operations
- Pipeline systems definition, survey, and route selection
- Safety, environmental, and regulatory considerations, focusing on Codes and Standards related to pipelines
- Pipeline conceptual and mechanical design for strength, stability and constructability
- Pipeline materials and components selection including line pipe, corrosion and cathodic protection, and coatings
- Specialized equipment and materials for integrating with subsea wellhead/manifold systems, side taps, insulation, and pipe-in-pipe
- Special design and construction considerations for risers and umbilicals, foreign pipeline crossings, single point moorings, and shore approaches
- Introduction to flow assurance considerations and pipeline integrity aspects including in-line inspection, leak detection and emergency planning considerations
- Pipeline operations, maintenance and repair considerations and their impact on design and material selection

Product Details

Categories: Midstream

Disciplines: Pipeline Engineering Offshore & Subsea

Levels: Foundation

Product Type: Course

Formats Available: In-Classroom

Instructors: Stuart Watson Ronald Frend Josh Gilad PetroSkills Specialist Chris Spraggon

In-Classroom Format

'22 Sep 12 - '22 Sep 16 | Course | In-Classroom (in Houston) $4,410.00