

Pipeline Engineering Programme

Module MC10: Pipeline Construction



Key Facts

- ✓ **Duration:** 1 week (5 teaching days)
- ✓ **Format:** In-person & online (Leoben, Austria)
- ✓ **Language:** English
- ✓ **Certificate:** Micro-Credential (ECTS transferable)
- ✓ **Prerequisites:** Technical background in fluid mechanics or engineering recommended; none required

Key Learning Outcomes

1. Understand the full lifecycle of onshore and offshore pipeline construction.
2. Select suitable construction methods based on terrain, environment and project needs.
3. Manage HSE compliance and risk during construction.
4. Coordinate activities across stakeholders and regulatory bodies.
5. Address construction challenges in difficult onshore and subsea conditions.
6. Ensure pipeline integrity through proper testing and documentation.

Module Overview

This module provides an overview of pipeline construction in both onshore and offshore environments. It covers the full construction lifecycle, including new installations, station and tank farm development, rehabilitation and conversion. Key topics include construction methods, equipment, logistics, safety, environmental considerations and project execution. Offshore elements such as subsea installation and marine operations are also introduced. The module equips participants with the practical skills needed to plan and manage safe, efficient and compliant pipeline construction projects.

Schedule

Day	Morning Session	Afternoon Session
1	Pre-Construction Planning and Right-of-Way	Construction Planning, Permitting and Stakeholder Coordination
2	Site Preparation, Trenching and Pipe Handling	Welding, Lowering-In, Backfilling and Crossings
3	Testing, Commissioning and Inspection	Safety, Environmental Management and Special Construction Conditions and QA/QC
4	Offshore Planning and Marine Surveys	Offshore Installation Methods: S-lay, J-lay and Reel-lay
5	Subsea Crossings and Protection	Offshore Testing, HSE, Risk Management and Coordination

Instructors



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