

Piping Design Course Content

Overview: The design, engineering and construction of process plants involve a multidisciplinary team effort. Plant layout and design of piping systems constitutes a major part of the design and engineering effort. The goal is to design safe and dependable processing facilities in a cost effective manner.

Day 1

Session 1: Introduction to

- Plant layout fundamentals and work flow procedures
- Terminology and symbols used in plant layout
- Plot plans, elevations and 3-D models

Session 2:

- Fundamental principles of chemical process technology
- Process flow diagrams (PFDs)
- Equipment used in process plants
- Instrument symbols and abbreviations

Day 2

Session 1:

- Piping and instrumentation diagrams (P & IDs)
- Piping design and engineering principles
- Terminology, symbols and abbreviations used in piping design
- Piping materials

Session 2:

- Piping specifications and piping codes
- Components of piping systems - fittings, flanges and valves
- Piping isometrics and bill of materials