**Contents of the course:**

* Overview of Oil & Gas Industry, Production Facilities, Process plants, etc.
* Role of a Piping Engineer in various fields of industry.
* Concept of EPC (Engineering Procurement Construction) Projects
* Piping design and engineering principles
* Terminology, symbols, and abbreviations used in piping design
* Components of piping systems – fittings, flanges and valves, Pipe Supports
* Piping specifications and piping codes
* Piping materials
* Plant layout fundamentals and workflow procedures
* Terminology and symbols used in plant layout
* Instrument symbols and abbreviations
* Process flow diagrams (PFDs)
* Piping and instrumentation diagrams (P&IDs)
* Equipment used in process plants
* Plot Plan, Equipment Layout, Piping Layout, GA Drawing, etc.
* Guidelines for the preparation of as-built drawings.
* Preparation of Nozzle orientation.
* Guidelines for the preparation of as-built drawings.
* Plant Layouts: 3D Modeling
* Piping isometrics and bill of materials