



**NARGAN**  
ACADEMY



# Advanced Detail Design in Piping

**CONTACT US:**



Nargan Academy



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## WHY CHOOSE THIS TRAINING COURSE?

In this course, advanced points for design of piping around equipment such as compressors, tower,... will be presented.

A significant part of engineering services in projects are related to the design of piping systems. According to this point, learning the design principles and its details have a remarkable impact on the projects' costs.

## WHO IS THIS TRAINING COURSE FOR?

This course is proper for mechanical and process engineers who passed preliminary design course.

## WHAT ARE THE GOALS?

By the end of this course, you'll achieved the ability of design and the accurate designing principles' recognition around the mentioned equipment in the syllabus.

## COURSE SYLLABUS (16 HOURS)

- Piping design around compressors
  - Reciprocating
  - Centrifugal
  - House & Structure
- Instrument design & accessibility
  - Levels
  - Pressure
  - Temperature
  - Flow meters
- Jacket Piping Design
- Tracing Design
- Utility Station Design
- Designing the lines around of Storage Tank/Dike Wall
- Designing the lines connected to Cooling Tower
- Designing the lines around of Spherical Tanks
- Designing piping around of Vertical Vessels & Column
  - Manhole & Down Comer
  - Nozzle Orientation
  - Platform & Ladder
  - Typical Arrangement
- Designing piping around of Horizontal Vessel
  - Manhole
  - Nozzle Orientation
  - Platform & Ladder
  - Typical Arrangement
- Designing the lines connected to Reactors
  - Manhole
  - Nozzle Orientation
  - Platform & Ladder
  - Catalyst Loading



## Behrooz Liravinia

- Ph.D. candidate in industrial management from University of Islamic Azad University Tehran South Branch
- M.Sc. in Mechanical Engineering-Separation energy exchange from Islamic Azad University Science and Research Branch
- Has MBA-Separation project management Certificate from University of Tehran
- More than 15 years' experience in piping design
- More than 5 years' experience of being a head of piping design unit
- Being an instructor of piping engineering courses at Nargan Co., Novin Parsian institute, Research Institute of Petroleum Industry, abadan, Shiraz, Isfahan, and Kermanshah refineries, ...

## THE COURSE CONTENT

### Day One

- Piping design around compressors
- Instrument design & accessibility
- Jacket Piping Design
- Tracing Design
- Utility Station Design
- Designing the lines around of Storage Tank/Dike Wall

### Day Two

- Designing the lines connected to Cooling Tower
- Designing the lines around of Spherical Tanks
- Designing piping around of Vertical Vessels & Column
- Designing piping around of Horizontal Vessel
- Designing the lines connected to Reactors