



Consulting and Training | Reach New Heights

Course Name

ASME B31.3 Process Piping Design Code

Sector Name

Mechanical Engineering

Document Type

Generated by Boostlab

[Click Here To Visit Course](#)

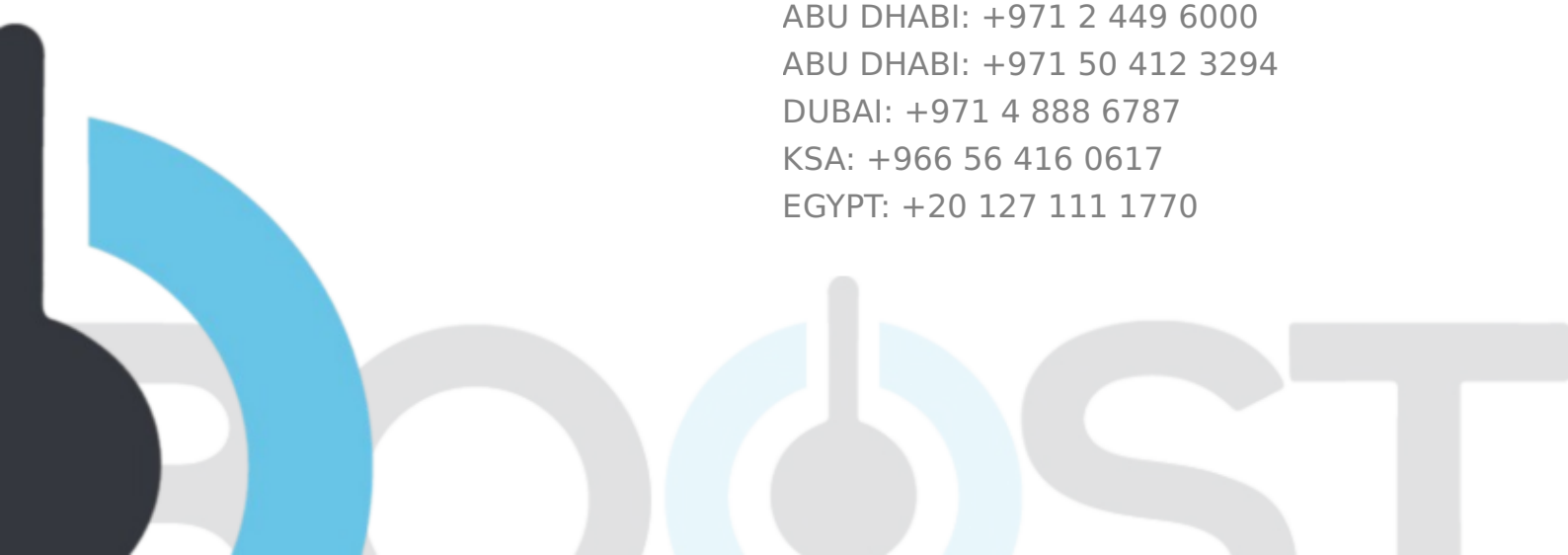
ABU DHABI: +971 2 449 6000

ABU DHABI: +971 50 412 3294

DUBAI: +971 4 888 6787

KSA: +966 56 416 0617

EGYPT: +20 127 111 1770



ASME B31.3 Process Piping Design Code

Course Introduction

This training course is designed to provide participants with the relevant concepts and background on the ASME B31.3 for Pressure process piping for the design, materials examination, testing, and non-metallic piping. This training course will discuss the introduction to the different parts of the ASME B31.3 Standard and will cover all requirements for safe design, construction, inspection, testing, operation, and maintenance of liquid pipeline systems. This focuses on the requirements for process piping related to the design, construction, fabrication, inspection, and examination of a safe and economical piping system.

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

[Click Here To Visit Course](#)



ASME B31.3 Process Piping Design Code

Target Audience

This training course is designed and beneficial for professionals such as Sr. Engineer, Engineer.

ABU DHABI: +971 2 449 6000

ABU DHABI: +971 50 412 3294

DUBAI: +971 4 888 6787

KSA: +966 56 416 0617

EGYPT: +20 127 111 1770

[Click Here To Visit Course](#)



ASME B31.3 Process Piping Design Code

Learning Objectives

- ✓ Understand the scope & definition of ASME B31.3, process piping design, construction & mechanical integrity
- ✓ Understand metallic pipe and fitting selection, including its system failure, bases for selection, and method requirements
- ✓ Identify the strengths of materials, including their requirements, and be able to identify the bases for design stresses
- ✓ Determine the components of pressure design and be able to know the concepts of weld joint strength factor and design pressure & temperature
- ✓ Know the process of valve selection and be able to list the requirements needed for the selection process
- ✓ Become familiar with the design of flanged joints and be able to describe their features & functions
- ✓ Introduce flexibility & flexibility analysis, and be able to explain the general considerations for the layout and support of pipes
- ✓ Learn the various types and designs of expansion joints and be able to describe their components and use
- ✓ Understand the fabrication and installation methods of piping and be able to list the requirements and guidelines needed in the inspection, examination, and testing of pipes
- ✓ Heighten awareness with the concept of instrument piping and pressure-relieving systems, and learn how these systems can be designed

- ✓ Know the design, fabrication, installation, inspection, examination, and testing methods for nonmetallic piping systems, category M Fluid service & high-pressure piping
- ✓ Review the concept of API 570, including its inspection, repair, alteration, and rerating of in-service piping

ABU DHABI: +971 2 449 6000

ABU DHABI: +971 50 412 3294

DUBAI: +971 4 888 6787

KSA: +966 56 416 0617

EGYPT: +20 127 111 1770

[Click Here To Visit Course](#)



ASME B31.3 Process Piping Design Code

Course Outline

✓ 01 DAY ONE

Introduction and history of ASME codes

- ✓ Scope and Definitions
- ✓ Content, Coverage, and Exclusions
- ✓ Design includes Design Pressure, Design Temperature
- ✓ Listed Components Unlisted Components
- ✓ Allowances for Pressure and Temperature Variations
- ✓ Allowable Stresses and Other Stress Limits
- ✓ Bases for Design Stresses
- ✓ Casting Quality Factor, E_c , and Weld Joint Quality Factor, E_j
- ✓ Pressure design of components
- ✓ Branch Connections
- ✓ Pressure Design of Flanges and Blanks
- ✓ Fluid service requirements for piping components and piping joints

ABU DHABI: +971 2 449 6000

ABU DHABI: +971 50 412 3294

DUBAI: +971 4 888 6787

KSA: +966 56 416 0617

EGYPT: +20 127 111 1770

[Click Here To vist Course](#)



ASME B31.3 Process Piping Design Code

Course Outline

✓ 02 DAY TWO

Flexibility and support

- ✓ Chapter iii materials
- ✓ Listed Materials, Unlisted Materials. Unknown Materials. Reclaimed Materials.
- ✓ Lower Temperature Limits
- ✓ Impact Testing Methods and Acceptance Criteria
- ✓ Fluid Service Requirements for Materials
- ✓ Chapter IV Standards for Piping Components
- ✓ Chapter V Fabrication, Assembly, and Erection
- ✓ Welding and Brazing Qualification, procedures Specifications.
- ✓ Preheating
- ✓ Heat treatment requirements
- ✓ Bending and forming
- ✓ Assembly and erection

ABU DHABI: +971 2 449 6000

ABU DHABI: +971 50 412 3294

DUBAI: +971 4 888 6787

KSA: +966 56 416 0617

EGYPT: +20 127 111 1770

[Click Here To vist Course](#)



ASME B31.3 Process Piping Design Code

Course Outline

✓ **03 DAY THREE**

Chapter VI Inspection, Examination, and Testing

- ✓ Responsibility and qualifications for Inspection and examination
- ✓ Extent of Required Examination
- ✓ Radiographic and Ultrasonic Examination
- ✓ Testing Required Leak Test
- ✓ Hydrostatic Leak Test
- ✓ Pneumatic Leak Test
- ✓ Hydrostatic-Pneumatic Leak Test

ABU DHABI: +971 2 449 6000

ABU DHABI: +971 50 412 3294

DUBAI: +971 4 888 6787

KSA: +966 56 416 0617

EGYPT: +20 127 111 1770

[Click Here To vist Course](#)



ASME B31.3 Process Piping Design Code

Course Outline

✓ 04 DAY FOUR

Chapter VII Nonmetallic Piping and Piping Lined with Nonmetals

- ✓ Pressure design of piping components
- ✓ Fluid service requirements for nonmetallic materials
- ✓ Materials general requirements
- ✓ Fabrication, assembly, and erection
- ✓ Inspection, examination, and testing
- ✓ Chapter viii piping for category M Fluid Service

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

[Click Here To vist Course](#)



ASME B31.3 Process Piping Design Code

Course Outline

✓ **05 DAY FIVE**

Chapter IX High-Pressure Piping

- ✓ Chapter X High Purity Piping
- ✓ Review the codes appendix
- ✓ Review of code tables.

ABU DHABI: +971 2 449 6000

ABU DHABI: +971 50 412 3294

DUBAI: +971 4 888 6787

KSA: +966 56 416 0617

EGYPT: +20 127 111 1770

[Click Here To vist Course](#)



ASME B31.3 Process Piping Design Code

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
Sept. 21, 2026	Sept. 25, 2026	5 days	4250.00 \$	UAE , Abu Dhabi
Dec. 20, 2026	Dec. 24, 2026	5 days	4250.00 \$	KSA , Riyadh
Feb. 1, 2027	Feb. 5, 2027	5 days	4950.00 \$	Spain , Madrid
May 24, 2027	May 28, 2027	5 days	4250.00 \$	UAE , Dubai

ABU DHABI: +971 2 449 6000
ABU DHABI: +971 50 412 3294
DUBAI: +971 4 888 6787
KSA: +966 56 416 0617
EGYPT: +20 127 111 1770

[Click Here To vist Course](#)

info@boostuae.com info@boostorg.com

Generated by BoostLab •

