

ASME BPVC SECTION V Nondestructive Examination

Course general description:

The course provides an introduction to the ASME Boiler & Pressure Code, Section V – Nondestructive Examination (NDE). Participants will learn about the various applications of NDE as well as the various techniques. NDE uses techniques such as radiographic examination, ultrasonic examination, magnetic particle examination, liquid penetrant examination. Focusing on explaining the most important code paragraphs and its applications.

The course presents the required practical code knowledge needed in daily work activities in engineering and production companies.

Audience:

Welding engineers, Piping engineers, pipeline engineer, construction engineers, maintenance engineers, production engineers, process engineers, mechanical engineers.

Course objectives:

At the end of this course the participant should be able to,

- Comprehends the code structure and organization
- Recognize and applies code paragraphs used the daily work activities
- Locate and selected the suitable code paragraph to specific situation
- Solve different engineering issues in accordance with code provisions

Course Level

Fundamental level

Fundamental: covers concepts and skills in the topic being studied (Usually 0-3 years in the field)

Intermediate: Individuals with some engineering experience will learn to apply their existing engineering knowledge and skills to problems (Usually 3-5 years in the field)

Advanced: Participants analyze and critique information about complex problems or newly emerging areas, includes mastery of skills, evaluation, management, and supervision. (Usually over 5-10 years in the field)

Participant evaluations

	Points	Frequent
Exercise sheets	60	one exercise sheet per week for online instructor led method. one exercise sheet per two days for live interactive instruction method
Case study/ final exam	40	Final course integrated case study will be submitted at the end of the course and/or final exam (MCQ)

- The above plan can be modified as required

Course duration:

5 days

Course location:

Cairo-Dubai-Istanbul

Course equivalent ASME standard PDH = 25 Hr.

5 DAYS for live interactive instruction method OR

8 lectures, twice per week for online instructor led method

5 hours	<ul style="list-style-type: none"> • Introduction to ASME codes & standards • Introduction and Scope of Section V • Types of Nondestructive Examination 	Delivery Method: Presentation Discussion Exercise sheets Case study Final exam
5 hours	<ul style="list-style-type: none"> • Radiographic Examination 	
5 hours	<ul style="list-style-type: none"> • Ultrasonic Examination 	
5 hours	<ul style="list-style-type: none"> • Liquid Penetrant Examination • Magnetic Particle Examination. 	
5 hours	<ul style="list-style-type: none"> • Visual Examination and Leak Testing • Discussion and case study demonstrating engineering deliverables on recent project 	

Notes:

- The course is developed and accredited by ASME certified regional instructor based on ASME international training policy
- The Course is equivalent to ASME standard PDH = 25 Hr.
- The course is a part of ASME professional program “specialization diploma in piping and pressure vessels”
- The Course category (B)

Methodology:

- 50% lectures & concepts
- 10% Videos
- 10% Case studies
- 10% Exercises
- 10% Discussions
- 10% Software (if applicable or examples)

Course code: (TEME007)