



MU235: Understanding Codes and Standards

Training Description:

This training course covers a detailed insight to the participants for understanding of Codes and Standards with emphasis on the right approach and methodology for using the codes. It helps the participants to understand the Code objectives, Code intents, stated and implied requirements (i.e. letter and spirit of the code). It also helps the participants to know the mandatory, recommended and optional stipulations of the code. The training course also covers overview of various codes and standards used in Process Industries for design, inspection, construction and in-service inspection. The training course will be delivered in such a way that most of the code concepts will be clarified by both the code statements and the relevant examples.

The training course also deals in: What is Code and what is standard (difference between them), Selection of appropriate code and standard for intended application, where one can take deviations from code etc. This intensive training course is designed such that participants with previous background of using the codes will understand the most effective and scientific use of codes for their purpose while the freshers will understand the correct approach and right use of the codes.

Training Objectives:

By the end of the training, participants will be able to:

- ✓ Learn the basic difference between code and standard
- ✓ Familiarize participants with the concepts and technical terms of Engineering Codes and standards
- ✓ Choose the right engineering code for an intended application and carry out simple code calculations
- ✓ Understand limitations imposed by various codes on material for construction for pressure components
- ✓ Have an overview of commonly adopted codes and standards in oil & gas, petrochemical and power industries
- ✓ Have an overview of common engineering codes as regards to design, material selection, construction, inspection and testing of pressure components

Training Designed for:

This course is intended for Design engineers, mechanical engineers and Plant managers, with or without experience in application of codes & standards. Design engineers, project engineers, inspection engineers, maintenance engineers and technicians will find this course valuable for them. Engineers, senior draftsmen, inspection, maintenance, and quality assurance personnel who work in the chemical, petroleum, utilities, petrochemical plants, fertilizer plants etc., will find it a time-saving means to broaden and update their knowledge of codes and standards.

Training Requirement:

“Hand’s on practical sessions, equipment and software will be applied during the course if required and as per the client’s request.”

Contents can be adapted to your specific wishes. It is therefore possible to focus on specific modules of the training course as per client’s learning needs and objectives. Further, it should be forwarded to us a month prior to the course dates.

Training Program:

DAY ONE:

- ❖ Introduction
- ❖ What is Code, Standard and Good Engineering Practice
- ❖ Objectives of Codes and Standards
- ❖ Assumptions in Codes and Standards
- ❖ Information provided by Codes
- ❖ Information not provided by Codes
- ❖ Role of engineering judgment
- ❖ Code Requirements, Recommendations and options / alternatives
- ❖ Code contents, Stated & implied stipulations in the Codes

DAY TWO:

- ❖ Various Design and Construction codes internationally adopted
- ❖ Codes for Pressure vessels
- ❖ Codes for Piping installations
- ❖ Codes for Tanks
- ❖ Other Engineering Codes/ miscellaneous Codes
- ❖ Various in-service Inspection codes
- ❖ Codes for inspection of Pressure vessels
- ❖ Codes for inspection of Piping installations

DAY THREE:

- ❖ Codes for inspection of Tanks
- ❖ Difference between the construction codes and in-service inspection codes
- ❖ Understanding of various codes
- ❖ Brief overview of Codes for Pressure vessels
- ❖ Brief overview of Codes for Piping installations
- ❖ Brief overview of Codes for Tanks
- ❖ Brief overview of Codes for inspection,
- ❖ Codes for Welding qualification

DAY FOUR:

- ❖ Understanding of Various in-service Inspection codes
- ❖ Brief overview of Codes for inspection of Pressure vessels (API510)
- ❖ Brief overview of Codes for inspection of Piping installations (API570)
- ❖ Brief overview of Codes for inspection of Tanks (API 653)
- ❖ What is Standardization
- ❖ Why adopt standards, Concept of standardization
- ❖ Principles behind usability of standards
- ❖ Introduction to various normally used Standards

DAY FIVE:

- ❖ Introduction to Various Standards
- ❖ Introduction to ASME B 16.5
- ❖ Introduction to ASME B 16.34

- ❖ Introduction to ASME B 36.10, 36.19
- ❖ Introduction to API 600 & 610
- ❖ ASTM material standards
- ❖ Course Conclusion
- ❖ POST-ASSESSMENT and EVALUATION

Training Methodology:

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures, Concepts, Role Play
- 70% Workshops & Work Presentations, Techniques, Based on Case Studies & Practical Exercises, Gamification, Software & General Discussions
- Pre and Post Test

Training Certificate(s):

CMCT Internationally recognized certificate(s) will be issued to each participant who completed the course.

Training Fees:

TBA as per the course location - This rate includes participant's manual, hand-outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Note: The 5% VAT (Value Added Tax), will be effective starting 01st of January 2018 as per the new regulation from the UAE Government. The VAT applies for all quotation both for local and abroad.

Training Timings:

Daily Timings:

07:45 - 08:00	Morning Coffee / Tea
08:00 - 10:00	First Session
10:00 - 10:20	Recess (Coffee/Tea/Snacks)
10:20 - 12:20	Second Session
12:20 - 13:00	Recess (Prayer Break & Lunch)
13:00 - 14:00	Last Session

For training registrations or in-house enquiries, please contact:

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