



Quality Management & Operational Excellence

Preparation of Certified Quality Engineer (CQE)

Course Introduction

Becoming a CQE brings numerous advantages not only your personal career but also to your organization. This makes your organization better at identifying process issues that waste time and money, use the time and money saved to further develop the capabilities of your organization, use these improved organizational capabilities to drive the bottom line (earnings). Organizations will also be able to invest these cost and time savings to provide improved products and services.

This training Program is designed to provide participants with the necessary knowledge and concepts in order for them to achieve a recognized mastery in the quality discipline. This Training program will allow participants to have the knowledge and skills required to improve the processes that drive customer satisfaction, which will improve the business performance of your organization.

Target Audience

The Certified Quality Engineer (CQE) Preparation course targets:

- Quality & Manufacturing Engineers – Ensuring product and process quality.
- Process Improvement Specialists – Applying Six Sigma, Lean, and quality methods.
- Regulatory & Compliance Officers – Meeting industry standards.
- Aspiring CQEs & Students – Preparing for CQE certification.

Learning Objectives

- Understand the principles of product and service quality evaluation and control.
- Understand The Quality Management System (QMS).

- Understand ASQ Code of Ethics for Professional Conduct.
- Discover the Barriers to Quality Improvement.
- Develop and operate quality control systems, application and analysis of testing and inspection procedures.
- Understand product quality design and control processes.
- Use metrology and statistical methods to diagnose and correct improper quality control practices, an understanding of human factors and motivation.
- Familiarize oneself with quality cost concepts and techniques.
- Develop and administer management information systems and audit quality systems for deficiency identification and correction.

Course Outline

• 01 DAY ONE

Introduction to Quality Management:

- Quality Philosophies and Foundations.
- The Quality Management System (QMS).
- ASQ Code of Ethics for Professional Conduct.
- Facilitation Principles and Techniques.
- Barriers to Quality Improvement.

The Quality System:

- Elements of the Quality System.
- Documentation of the Quality System.
- Quality Standards and Other Guidelines.
- Quality Audits.
- Cost of Quality (COQ).
- Quality Training.

• 02 DAY TWO

Product and Process Design

- Classification of Quality Characteristics.
- Design Inputs and Review.
- Technical Drawings and Specifications.
- Design Verification.
- Reliability and Maintainability.
- Reliability and maintainability indices.
- Bathtub curve.

• 03 DAY THREE

Product and Process Control:

- Product & Process Control Tools.
- Material Control.
- Acceptance Sampling.
- Measurement & Testing.
- Metrology.
- Measurement System Analysis.
- Reliability/safety/hazard assessment tools.
- Quality Risk Management Tools.

• 04 DAY FOUR

Project Management:

- Tools.
- Material Control.
- C. Acceptance Sampling.
- E. Metrology.
- F. Measurement System Analysis (MSA).

Quantitative Methods and Tools

- Collecting and Summarizing Data.
- Quantitative Concepts.
- Probability Distributions.
- Statistical Decision-making.
- Relationships Between Variables.
- Statistical Process Control (SPC).
- Process and Performance Capability.
- Design and Analysis of Experiments.

• **05 DAY FIVE**

Continuous Improvement:

- Measuring Quality.
- Quality Control Tools.
- Continuous Improvement Techniques.
- Corrective Action.
- Preventive Action.
- Workshop.

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
May 4, 2025	May 8, 2025	5 days	4250.00 \$	Bahrain - Manama
Aug. 18, 2025	Aug. 22, 2025	5 days	4250.00 \$	UAE - Dubai
Nov. 17, 2025	Nov. 21, 2025	5 days	5950.00 \$	USA - Texas