

“Certified Quality Engineer – Training Course” Top Level Topics

(Based on the ASQ CQE Body of Knowledge, with permission)

Type: On demand

Format: Online E-learning

CEU Hours: 2.74 (length is 27.4 hours)

Instructor(s): Ned Schneider, Mark Lindsey

Availability: 365 days from original purchase date

Facilitator: AREngineering, LLC

I. Management and Leadership

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

II. 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

III. Product, Process, and Service Design

- Classification of Quality Characteristics

- Design Inputs and Review
- Technical Drawings and Specifications
- Verification and Validation
- Introduction to Reliability Concepts
- Reliability / Safety / Hazard Assessment Tools

IV. Product and Process Control

- Methods
- Material Control
- Acceptance Sampling
- Measurement and Test
- Metrology
- Measurement System Analysis (MSA)

V. Continuous Improvement

- Quality Control Tools
- Quality Management and Planning Tools
- Continuous Improvement Methodologies
- Lean tools
- Corrective Action
- Preventive Action

VI. Quantitative Methods and Tools

- Collecting and Summarizing Data
- Quantitative Concepts
- Probability terms and concepts

- Probability Distributions
- Statistical Decision-Making
- Relationships Between Variables
- Statistical Process Control (SPC)
- Process and Performance Capability
- Design and Analysis of Experiments

VII. Risk Management

- Risk Oversight
- Risk Assessment
- Risk Control

Link to ASQ CQE Brochure:

<https://asq.org/cert/resource/pdf/certification/inserts/CQE%20insert%202016.pdf>