ASQ-Certified Quality Engineers (CQE-ASQ)

Course Outline:

1. Management and Leadership
    1. Quality Philosophies and Foundations
    2. The Quality Management System (QMS)
    3. ASQ Code of Ethics for Professional Conduct
    4. Leadership Principles and Techniques
    5. Facilitation Principles and Techniques
    6. Communication Skills
    7. Customer Relations
    8. Supplier Management
    9. Barriers to Quality Improvement
2. The Quality System
    1. Elements of a Quality System
    2. Documentation of the Quality System
    3. Quality Standards and Other Guidelines
    4. Quality Audits
    5. Cost of Quality (COQ)
    6. Quality Training
3. Product and Process Design
    1. Classification of Quality Characteristics
    2. Design Inputs and Review
    3. Technical Drawings and Specifications
    4. Design Verification
    5. Reliability and Maintainability
4. Product and Process Control
    1. Tools
    2. Material Control
    3. Acceptance Sampling
    4. Measurement and Test
    5. Metrology

6. Measurement System Analysis (MSA)

5. Continuous Improvement
    1. Quality Control Tools
    2. Quality Management and Planning Tools
    3. Continuous Improvement Techniques
    4. Corrective Action
    5. Preventive Action
6. Quantitative Methods and Tools
    1. Collecting and Summarizing Data
    2. Quantitative Concepts
    3. Probability Distributions
    4. Statistical Decision-Making
    5. Relationships Between Variables
    6. Statistical Process Control (SPC)
    7. Process and Performance Capability
    8. Design and Analysis of Experiments
7. Risk Management
    1. Risk Oversight
    2. Risk Assessment
    3. Risk Control