

## **ASQ CQE Preparation Course**

This is an ASQ training preparation class for the CQE (Certified Quality Engineer) ASQ certification. The CQE ASQ (Quality Engineer) certification class consists of 93 modules (total expected time = 121 hours). This class is designed to prepare the student for the ASQ CQE certification exam. This certification is required for Quality Engineers in many organizations. The course includes our lecture on test taking strategies and test taking skills as well as practice exams designed to prepare the student for their certification exam. To view the BOK for the CQE go to http://asq.org/cert/quality-engineer/bok. Expected course time = 40 hours lecture time + 39 hours testing time + 42 hours reading time = 121 hours. Target Market: Individuals who desire to become or increase their skill level in the role of Quality Engineer and to obtain their ASQ certification as a CQE. This training helps prepare students to become powerful quality engineers. Online ASQ CQE Prep. Class.

## **Course Lectures**

How to Use the Alpha TC Website (17:20)

**CQE** Introduction

How to sign up for an ASQ exam (7:09)

Test Taking Strategies Module I and critical stacks (58:33)

Test Taking Strategy Module II (1:06:08)

Introduction to Auditing (53:12)

Fundamental Theories (Rev B) (1:05:28)

Introduction to Transformation (1:30:48)

Fundamentals and Project Selection (1:30:17)

Systematic Problem Solving (50:56)

Quality Gurus (25:47)

Deming Story (36:48)

Deming Story (36:48)

Forming Storming Norming Performing (8:06)

Nominal Group Technique (17:50)

Conflict Resolution (13:48)

Central Limit Theorem (1:03:00)

Five Why's (5 Why's) (08:11)

Variables Data SPC (X bar R) (1:11:22)

Fundamental Quality Tools (32:59)

Controlling Processes (1:04:22)

Risk Management (41:23)

Short Run SPC (32:24)

Measurement Systems Analysis (MSA)(1:20:18)

Median Chart SPC (18:23)

X Bar S Chart SPC (05:25)

p and np Chart SPC (49:18)

U and C Chart SPC (25:11)

Capability Study (1:09:04)

Z Statistic Capability (24:45)

Probability Statistics (32:21)

Permutations and Combinations (15:40)

Non Normal Distributions (1:06:14)

Z Statistic Inference (Sigma is constant 1:06:21)

Z Statistic Inference (Sigma Changes) (1:15:49)

t Statistic Inference (26:55)

Inference Paired t Test (9:15)

Confidence Intervals for the Mean (20:31)

Confidence Interval of Variance (6:25)

Confidence Intervals for Proportions (5:30)

Hypothesis Testing (23:48)

F Statistic Inference (35:02)

Chi Squared Inference (45:21)

ANOVA Inference (47:49)

Inference Studies for Proportions (8:40)

Linear Regression Analysis (49:29)

Correlation Analysis (17:07)

Statistical Analysis in Linear Regression (36:45)

Linear Regression Example (28:39)

Reliability Engineering (Bathtub Curve) (24:11)

Reliability Engineering (Vocabulary) (29:02)

Reliability Engineering (Block Diagrams)(21:41)

Introduction to Statistical Design of Experiments (DOE)(1:17:00)

Full Factorial Design of Experiments (DOE)(51:25)

Fractional Factorial Design of Experiments (24:26)

Screening Design of Experiments (8:13)

Taguchi Design of Experiments (34:50)

DOE Latin Square Designs (6:33)

Attribute Sampling Plan (35:16)

Variable Sampling Plan (13:41)

Quality Function Deployment (1:54:50)

Gantt Chart (08:34)

Activity Network Diagram (12:21)

PERT (14:27)

Critical Path Method (CPM) (13:47)

PDPC (Process Decision Program Chart) (06:00)

Matrix Diagrams (12:54)

Prioritization Matrices (17:14)

Interrelationship Digraph (7:58)

Benchmarking (16:59)

DFSS IDOV, DMADV and DMADOV (1 of 7)(1:04:18)

DFSS Design for X, French Model (2 of 7)(31:31)

DFSS Taguchi Module (3 of 7)(1:21:00)

Chapter 2 CQE Test Review (34:50)

Chapter 3 CQE Test Review (22:11)

Chapter 4 CQE Test Review (44:50)

Chapter 5 CQE Test Review (27:26)

Chapter 6 CQE Test Review (16:17)

Chapter 7 CQE Test Review (41:46)

Chapter 8 CQE Test Review (1:01:08)

Chapter 9 CQE Test Review (1:33:33)

Chapter 10 CQE Test Review (1:08:55)

Chapter 11 CQE Test Review (12:00)

Memory Maps (Flow Charts)

FAQ (SSBB and CQE)



## Learning and Doing

Summaries

Practice Exam 1 SSBB and CQE

Practice Exam 2 SSBB and CQE

Practice Exam 2.5 CQE (optional for SSBB)

Practice Exam 3 SSBB and CQE

Practice Exam 4 SSBB and CQE

Practice Exam 5 SSBB and CQE

Practice Exam 7 SSBB, SSGB, CQE

Practice Exam 8 SSBB and CQE

Practice Exam 10 SSBB, SSGB, CQE

Practice Exam 12 SSBB and CQE

Practice Exam 13 SSBB and CQE

Practice Exam 14 SSBB and CQE

Remember to take CQE final exam #1

Remember to take CQE Final Exam #2

Remember to take CQE final exam #3

Remember to take CQE final exam #4

Remember to take CQE final exam #5

Remember to take CQE final exam #6