

WHY BECOME A CERTIFIED QUALITY ENGINEER?

As a Certified Quality Engineer (CQE) you will have achieved a recognized mastery in the quality discipline—the CQE is the top ASQ certification in the technical career track. As a CQE, you will have the knowledge and skills required to improve the processes that drive customer satisfaction, which will improve the business performance of your organization.

What Are the Core Competencies of a CQE?

- Learn quality management and leadership: the philosophies and foundations of quality, its leadership principles and techniques, and proven communication skills.
- Develop the quality management system (QMS): its design and documentation, standards and guidelines, quality training and auditing, and the cost of quality (COQ).
- Design of products, processes, and services: classification of characteristics, verification and validation, and reliability and maintainability.
- Learn critical skills required to implement effective product and process control, including acceptance sampling, material control, metrology, and measurement system analysis.
- Master the quantitative tools and techniques that drive continuous improvement, from lean and corrective action to kaizen and Six Sigma.
- Understand the ways to summarize data, draw statistical conclusions, analyze distributions, test hypotheses, perform capability studies, and design and execute experiments.
- Be fluent in risk management: its oversight, assessment, control, auditing, and testing.

What Is the Value to Your Company?

- 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).
- Invest these cost and time savings to provide improved products and services.
- See the improvements increase customer satisfaction, which drives the top line (revenue).
- Increase market share—more for you, less for your competitors.

What Is the Value to You?

- Becoming a CQE provides you with an internationally recognized credential, and validates your expertise and knowledge. CQEs earn an average of almost \$10,000 more than those who are not certified.*

*Salary data can be found in the Quality Progress Salary Survey, December 2016, pp. 14-42.

asq.org/quality-progress/2016/12/salary-survey/2016-the-complete-report.html



Qualifications and Requirements for CQE Certification

Candidates must have eight years of on-the-job experience in one or more of the areas of the body of knowledge. A minimum of three years of this experience must be in a decision-making position (note: this does not require supervisory or management positions). Candidates must have worked in a full-time, paid role; paid intern, co-op, etc., do not apply.

Education

Candidates who have completed a degree from a college, university, or technical school can waive some part of the eight-year experience requirement as follows:

- Diploma from a technical or trade school— one year waived
- Associate’s degree—two years waived
- Bachelor’s degree—four years waived
- Master’s or doctorate degree—five years waived

Quality Engineer Learning Resources and Exam Preparation

- Quality Engineer Certification Preparation Training
- *The Certified Quality Engineer Handbook, Third Edition*
- The Certified Quality Engineer Body of Knowledge (BoK)

Recertification Required?

Yes, every three years.

How to Enroll for Certification

Visit asq.org/cert

MARKETPLACE INFORMATION

COMMON JOB FUNCTIONS

| |
|--------------------------------|
| Business Process Analyst |
| Manufacturing Manager |
| Operating Systems Specialist |
| Project Manager |
| Quality Assurance Professional |
| Quality Auditor |
| Quality Control Inspector |
| Quality Engineer |
| Supplier Quality Engineer |
| Warehouse Operations Manager |

COMMON INDUSTRIES

| |
|------------------------------|
| Automotive |
| Aviation, Space, and Defense |
| Biomedical |
| Construction |
| Energy |
| Engineering |
| Information Technology |
| Manufacturing |
| Medical Devices |
| Transportation |

Key Market Trends

- According to the U.S. Department of Labor, employment of architecture and engineering occupations from 2014-2024 is projected to add about 67,200 new jobs.
- The most popular college major choice for high school seniors surveyed by CareerBuilder—the majority of whom already have a career in mind—is engineering.