

# CERTIFIED QUALITY ENGINEER



## Objectives

This course aims to equip participants with a complete set of tools and techniques for control and improvement of product quality, reliability and safety. It covers aspects pertaining to the implementation of an effective quality control system as well as experimental design for investigation and quality improvement. This course will also cover management planning, inspection and testing to achieve reliable, maintainable and safe products to customer specifications and requirements.

## Duration

3 weekdays (Monday, Wednesday, Friday) | 7pm to 10pm | 5 months | 161 hours

## Who should attend

Engineers or Managers and those participants who intend to acquire knowledge in quality assurance and statistical methods to improve product quality, diagnose and solve various industrial quality problems for overall improvement of the quality systems.

## Entry Requirement

A degree with at least 1 year working experience in the quality field.

## Course Fees

Member: S\$4,704.48

Non-Member: S\$5,645.76

*Registration Fee of S\$17.28 and Exam & Certification Fees of S\$216 apply*

*SDF funding & SkillsFuture applicable*

*All fees stated are inclusive of 8% GST*

## Assessment Method

Written examination - held approximately 4 weeks from end of course



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## Course Contents

### Quality Practices and Applications

- Quality Systems
- Product, Process and Material Control
- Quality Audit
- Quality Improvement Tools: Cost of Quality, Continuous
- Improvement Tools Quality Planning & Management
- Six Sigma Approach, Human Resource Management
- Supplier Management

### Statistical Principles and Applications – Six Sigma

- Statistical Quality Control
- Statistical Inference
- Correlation and Regression Analysis
- Statistical Process Control
- Design of Experiments

### Measurement Systems

- Metrology
- Repeatability & Reproducibility Studies, Destructive & Non-destructive Testing Concept

### Practical Reliability & Product Safety Applications

- Basic Reliability Concepts
- Product Design, Development and Production
- Maintainability
- Product Safety

## Key Benefits

### Participant will have a fundamental understanding of:-

- Quality principles, quality systems, standards, organisational and team dynamics, customer expectations and satisfaction,
- Basic understanding of the audit process including types of audits, planning, preparation, execution, reporting results and follow-up supplier relations and performance,
- Leadership, training, interpersonal relationships, improvement systems and professional ethics.
- Develop and implement quality programs, including tracking, analysing, reporting and problem solving.
- Knowledge of reliability, maintainability, and risk management, including key terms and definitions, modeling, systems design, assessment tools and reporting.
- Thorough understanding of problem-solving and quality improvement tools and techniques.
- Statistical principles to acquire and analyse data using appropriate standard quantitative methods across a spectrum of business environments to facilitate process analysis and improvements.



Please refer to this URL  
<https://www.sqi.org.sg/courses/>  
or QR Code for soft copy  
and updated training schedule

## Membership Application

Register membership online at [www.sqi.org.sg/membership-join/](http://www.sqi.org.sg/membership-join/) or contact us to get the membership application form.

### Membership Categories:

- ~ Organisation membership
- ~ Individual membership

Singapore Quality Institute (SQI) operates as a non-profit professional institute that promotes and advances excellence in the field of quality in Singapore; and actively champions quality initiatives in the region and around the world through networking and collaborating with other international quality organisations.

SQI is a World Partner of the American Society for Quality (ASQ); and a Board Member of both the Asian Network for Quality (ANQ) and the World Alliance for Chinese Quality (WACQ).

