



Overview

Quality Engineering is concerned with the practice and principles of product and service quality assurance and control. It includes development systems and analysis methods to meet or exceed the customer's expectations. Quality Engineering encloses all tasks from ideation to execution. The focus is on improving the quality of the final product or service and an efficient production or service provision process.

It includes identifying and reducing waste in different forms. Quality Engineering tools and methods are often developed and implemented in the production, or the service provision processes.

Quality is a competitive edge. This is the modern quality definition. Old definitions are expired, which means that modern and excellent organizations should look for people who understand and value this definition.

Certified Quality Engineer (CQE) will practically understand that the quality of product, service, and process is the responsibility of everyone in the organization. So, CQE will be able to focus on how to continually improve the quality through leadership, empowerment, and total involvement of people in order not only to meet but to exceed the stakeholders' expectations.

CQE is not only an engineer, rather CQE is a professional who understands a product or service characteristics and can design a product or service and improve its quality and performance using different quality tools and techniques and different types of statistical analysis.

Objectives

CQE is a quality professional who can design and improve a product, service, or a process. In addition, CQE can develop the required procedures, develop QC system, QA system, and QMS.

This program will enable the participants to fully understand quality, quality management, process, process improvement techniques, product, service, and many other disciplines that will enable a participant to improve an organization performance and reduce operations cost and waste.

Furthermore, this program is designed to help quality professionals to be CQE and to entitle them to:



- Understand quality, quality management, and total quality management.
- Get the required knowledge to build quality management system and avoid poor quality either for products, services, or processes.
- Design QA system, QC system.
- Understand the process and how to measure the process characteristics.
- Design product, service, or process.
- Collect and analyze the required data for continuous improvement.
- Use lean principles, tools, and six sigma methodology to eliminate defects and improve a process performance.
- Understand and use the proper quality tools especially the different types of control charts.
- Apply statistical techniques and tools to measure, improve, and monitor a business process performance.
- Use Minitab and conduct data analysis.

Who can become a CQE?

“CQE: Certified Quality Engineer” training program and certificate is not only for engineers, but also designed for all who seek this global credential. CQE is a professional who understands a product or service characteristics and can design a product or service and improve its quality and performance using different quality tools and techniques and different types of statistical analysis.

It is recommended to have university degree and at least four years on-job experience in any field related to the topics or contents of the course.

Targeted Groups

CQE training program is designed for the public and private sectors that look to improve current business productivity and profitability. In addition, this program will be at great benefit for all types of companies, banks, IT and Software companies, manufacturing, production, healthcare, and service organizations, top management, engineers, production managers, quality engineers, QC and QA departments.

Furthermore, this certificate will be at great value for all who seek to be distinguished and different to open new business opportunity or improve current knowledge and skills in different aspects of quality engineering and then to boost his/her career.



Program Outlines: this program will be presented as follows:

Part One: Quality Management and Leadership

- Chapter 1: Quality Overview
- Chapter 2: Quality Management
- Chapter 3: Quality Leaders

Part Two: Quality Management System (QMS)

- Chapter 4: QMS Overview
- Chapter 5: Quality Documents
- Chapter 6: QMS Standards
- Chapter 7: Quality Audit

Part Three: Statistical Analysis Techniques

- Chapter 8: Descriptive Statistics
- Chapter 9: Inferential Statistics

Part Four: Business Process Analysis

- Chapter 10: Business Process Management and Documentation
- Chapter 11: Process Capability Analysis
- Chapter 12: Sigma Level (Six Sigma)
- Chapter 13: Cost of Quality

Part Five: Process, Product, and Service Design

- Chapter 14: Quality Characteristics
- Chapter 15: Design Inputs and Outputs
- Chapter 16: Design Phases
- Chapter 17: Design For Six Sigma (DFSS)
- Chapter 18: Design Verification and Validation
- Chapter 19: Risk Management
- Chapter 20: Design FMEA (DFMEA)



Part Six: Process, Product, and Service Control

- Chapter 21: Measurement System Analysis (MSA)
- Chapter 22: Acceptance Sampling
- Chapter 23: Statistical Process Control (SPC)

Part Seven: Quality Continuous Improvement

- Chapter 24: Corrective and Preventive Actions
- Chapter 25: Quality Improvement Tools and Techniques

There will be different workshops and group activities to conduct different data analysis techniques using the Minitab.

Program Duration

"Certified Quality Engineer (COE)" training program will be held on 60 training hours over 18 days for the public. This program can be customized based on certain needs for in-house training.

Training Material

Once a participant confirmed his/her registration, he/she will receive the training material in pdf format. We strongly recommend all participant to print the material and use it during the training sessions to follow with the instructor and be able to take notes at each topic or at each phase.

Online Certification Exam

To be Certified Quality Engineer (COE), a participant has to pass the certification exam. The exam contains *150 multiple choice questions*, each question with four choices, you have to choose the best answer that fits the question. The exam is an open book type. Exam duration is five and half hours (330 minutes). To pass the exam, a participant should score 65% or higher.

JAQM deals with all examinees equally with no bias. Exam results are checked multiple times by different persons and scored very accurately, therefore, JAQM doesn't provide answers to the certification exams, and doesn't accept requests to review the exam results.



All participants will get a completion e-certificate issued by the Jordan Academy for Quality Management (JAQM) and internationally accredited by the International Accreditation Organization (IAO) located in the USA.

In addition, participants who pass the certification exam and score 65% or above will get the "Certified Quality Engineer (COE)" e-certificate issued from JAQM and internationally accredited by IAO. Participants who fail the exam can make sit for a new exam at retake fees of JD150.

Before the Exam

- Choose a quiet area of your home or office to take the exam.
- Do not go to public places, such as coffeeshops, restaurants, or libraries.
- Manage your place to avoid loud noises, such as television, radio, family, music, or visitors.
- Access the online exam system 15 minutes before to the scheduled time.
- Make sure that your computer is plugged into a power source for the duration of the exam.
- Make sure that you have stable and continuous Internet connectivity for the exam duration.

During the Exam

- You should use a PC or laptop with a webcam and microphone, not using a mobile. Mobiles should be switched off all the exam duration.
- You must place yourself within the webcam view, if you move out of the webcam view, then your exam session will be cancelled.
- You have to use a standalone scientific calculator.
- Get ready to remain in the webcam view for the duration of the exam.
- You must share your screen (Desktop) to be viewed by the exam observer.
- Access to the internet is denied.
- Exam activities will be recorded at JAQM side for evaluation purposes. JAQM will evaluate the exam process and examinee behavior.
- No one else can be in the room where you sit for the exam.
- At the end of the exam, you have to move all your answers to an official answers sheet that will be sent to you from JAQM.



Program Fees

Program fees are JD650. Certification exam fees are JD250. JAQM offers 10% as a special discount on the course fees for individuals only for this session. In addition, JAQM will support the individuals who invest in themselves by offer them a free certification exam. Discounts are not applicable for organizations' delegates. Accordingly, the course fees will only be JD585 with free certification exam only for individuals. Course fees will include:

- Completion e-certificate issued by JAQM and internationally accredited by the International Accreditation Organization (IAO) located in USA.
- Certification exam.
- Global credential "COE" e-certificate issued by JAQM and internationally accredited by the International Accreditation Organization (IAO).
- Training material in pdf format
- Hand outs
- Instructor notes

Payment Methods

To make it easy to settle the course fees, JAQM offers different alternatives for fees payment as follow:

- Transfer to JAQM's bank
- Cash deposit to JAQM's bank
- ZainCash Wallet
- Orange Money Wallet
- Western Union transfer

Please choose in the registration form the method that is best for you so we can send you the details based on your choice.

Date, Time, Venue

- Date: 29/5 – 7/7/2022 (Su, Tu, & Th)
- Time: 7:00 – 10:20 PM Jordan Time
- Exam date: will be agreed upon with the participants.
- Venue: online using the Zoom platform



Presentation Approach

- Online using Zoom platform
- English for data show
- English for material and handouts
- English/Arabic for delivery and discussion
- Workshops and group activities

Registration Process

To enroll in this course, please click the following link and fill out all the fields in the registration form:

<https://forms.gle/pZRJZycVmtcrPePV8>

Once you submitted the application form, you will receive a notice that your application is received and recorded. Registration is confirmed only after fees settled as per your payment method.

For further information or details, please email JAQM at training@jaqm.net, or call +962 6 516 0157, Mobile +962 7 7744 1808, WhatsApp +962 7 7744 1808.

JAQM has the right to delay, cancel, or update the course date without any legal or illegal responsibility due to the date change.