

## COURSE OVERVIEW TM0760 Certified Quality Engineer

<u>Course Title</u> Certified Quality Engineer

## Course Date/Venue

December 09-13, 2024/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference TM0760

Course Duration/Credits Five days/3.0 CEUs/30 PDHs

### **Course Description**







This practical and highly-interactive course includes real-life case studies and exercises where participants will be engaged in a series of interactive small groups and class workshops.

This course is designed to prepare participants for the ASQ-CQE examination. It covers the management and leadership, quality philosophies, foundations, quality management system (QMS) and quality information system (QIS), the ASQ code of ethics for professional conduct, and leadership and facilitation principles and techniques; the communication skills, customer relations, supplier management and quality improvement; and the comprising quality system of its elements. documentation, standards and other guidelines, guality audits, cost of quality and quality training.

Further, the course will also discuss the product, process and service design covering quality characteristics classification, design inputs and review, technical drawings and specifications, verification, validation, reliability and maintainability; the product and process comprising of methods, control material control. acceptance sampling, measurement and test, metrology and measurement analysis system; and the continuous improvement using quality control tools. qualitv tools. management and planning continuous improvement methodologies, lean tools and corrective and preventive actions.



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During this interactive course, participants will learn the quantitative methods and tools; collecting and summarizing date; the quantitative concepts and probability distributions; the statistical decision making and the relationship between variables; the statistical process control, process and performance capability, and design and analysis of experiments; and the risk management covering risk oversight, risk assessment and risk control.

#### **Course Objectives**

Upon the successful completion of this course, participants will be able to:

- Get prepared for the next ASQ CQE exam and have enough knowledge and skills to pass such exam in order to be certified as a "Certified Quality Engineer (CQE)" from an internationally recognized Accreditation Body (American Society for Quality – ASQ)
- Apply management and leadership covering quality philosophies and foundations, quality management system (QMS) and quality information system (QIS)
- Discuss ASQ code of ethics for professional conduct, leadership principles and techniques and facilitation principles and techniques
- Carryout communication skills, customer relations, supplier management and quality improvement
- Recognize quality system comprising of its elements, documentation, standards and other guidelines, quality audits, cost of quality and quality training
- Employ product, process and service design covering quality characteristics classification, design inputs and review, technical drawings and specifications, verification, validation, reliability and maintainability
- Apply product and process control comprising of methods, material control, acceptance sampling, measurement and test, metrology and measurement analysis system
- Implement continuous improvement using quality control tools, quality management and planning tools, continuous improvement methodologies, lean tools and corrective and preventive actions
- Identify quantitative methods and tools, collect and summarize date and discuss quantitative concepts and probability distributions
- Carryout statistical decision making and explain the relationship between variables
- Describe statistical process control, process and performance capability, and design and analysis of experiments
- Employ risk management covering risk oversight, risk assessment and risk control

## Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive "Haward Smart Training Kit" (**H-STK**<sup>®</sup>). The **H-STK**<sup>®</sup> consists of a comprehensive set of technical content which includes **electronic version** of the course materials, sample video clips of the instructor's actual lectures & practical sessions during the course conveniently saved in a **Tablet PC**.



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#### Who Should Attend

This course is essential for all individuals who desire to reinforce their skills, knowledge, and capacity to understand the certified engineer of quality/organizational excellence body of knowledge in preparation for taking ASQ certified engineer of quality/organizational excellence examination.

#### Exam Eligibility & Structure

- You must have eight years of on-the-job experience in one or more of the areas of the Certified Quality Engineer Body of Knowledge
- A minimum of three years of this experience must be in a decision-making position. "Decision making" is defined as the authority to define, execute, or control projects/processes and to be responsible for the outcome. This may or may not include management or supervisory positions
- If you were ever certified by ASQ as:-
  - Quality Auditor (CQA)
  - Reliability Engineer (CRE)
  - Software Quality Engineer (CSQE)
  - Manager of Quality/OrganizationalExcellence (CMQ/OE)
  - Supplier Quality Professional (CSQP), the experience used to qualify for certification in these fields applies to certification as a Quality Engineer (CQE)
- Candidate who have completed a degree from a college, university, or technical school with accreditation accepted by ASQ, part of the eight-year experience requirement will be waived, as follows (only one of these waivers may be claimed):-
  - Diploma from a technical or trade school-one year will be waived
  - Associate's degree-two years waived
  - Bachelor's degree-four years waived
  - Master's or doctorate-five years waived

Degrees or diplomas from educational institutions outside the United States must be equivalent to degrees from U.S. educational institutions

#### Training Methodology

All our Courses are including **Hands-on Practical Sessions** using equipment, State-of-the-Art Simulators, Drawings, Case Studies, Videos and Exercises. The courses include the following training methodologies as a percentage of the total tuition hours:

- 30% Lectures
- 20% Practical Workshops & Work Presentations
- 30% Hands-on Practical Exercises & Case Studies
- 20% Simulators (Hardware & Software) & Videos

In an unlikely event, the course instructor may modify the above training methodology before or during the course for technical reasons.

#### Training Fee

**US\$ 5,500** per Delegate + **VAT**. This rate includes H-STK<sup>®</sup> (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

#### Exam Fee

US\$ 715 per Delegate + VAT.



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## Course Certificate(s)

Internationally recognized certificates will be issued to all participants of the course who completed a minimum of 80% of the total tuition hours.

### **Certificate Accreditations**

Certificates are accredited by the following international accreditation organizations: -

• ACCREDITED

The International Accreditors for Continuing Education and Training (IACET - USA)

Haward Technology is an Authorized Training Provider by the International Accreditors for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this authority, Haward Technology has demonstrated that it complies with the **ANSI/IACET 2018-1 Standard** which is widely recognized as the standard of good practice internationally. As a result of our Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for its programs that qualify under the **ANSI/IACET 2018-1 Standard**.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking **Continuing Education Units** (CEUs) in accordance with the rules & regulations of the International Accreditors for Continuing Education & Training (IACET). IACET is an international authority that evaluates programs according to strict, research-based criteria and guidelines. The CEU is an internationally accepted uniform unit of measurement in qualified courses of continuing education.

Haward Technology Middle East will award **3.0 CEUs** (Continuing Education Units) or **30 PDHs** (Professional Development Hours) for participants who completed the total tuition hours of this program. One CEU is equivalent to ten Professional Development Hours (PDHs) or ten contact hours of the participation in and completion of Haward Technology programs. A permanent record of a participant's involvement and awarding of CEU will be maintained by Haward Technology. Haward Technology will provide a copy of the participant's CEU and PDH Transcript of Records upon request.

#### • \*\*\* \* BAC

## British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. BAC is the British accrediting body responsible for setting standards within independent further and higher education sector in the UK and overseas. As a BAC-accredited international centre, Haward Technology meets all of the international higher education criteria and standards set by BAC.

## **Accommodation**

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking.



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## Course Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Ahmed Mady is a Senior Engineer & Management Consultant with over 40 years of teaching/training and hands-on experience within the Oil & Gas industries. His field of specialization includes Reliability Maintenance Management, Maintenance Planning & Scheduling, Shutdown & Turnaround, Spareparts & Inventory Management, Pump Selection, Installation, Performance & Control, Pump & Valve Operation, Control, Maintenance & Troubleshooting, Machine Condition

Monitoring System, Quality Management, Certified Quality Management Professional, Quality Control Systems and Standards, Quality Management System (QMS), Quality Improvement, Quality Certification for Professional, Statistical Data Quality Management, SQM Certificate in Strategic Quality Management, Project Management, Contract Management, Human Resource Management, Logistics Management, Risk Management, Financial Management, Cost Engineering, Budgeting & Cost Control, Quality Management, Strategic Planning and Operations Management. Mr. Ahmed has consistently exemplified great expertise in Communication & Interpersonal Skills, Negotiation Skills, Presentation Skills, Motivation, Group Dynamics, Report Writing, Change Management, Performance Management, Logistics Management, Organization Procedure Evaluation & Auditing, Quality for Project Engineers, and Contracting & Systems Construction. Mr. Ahmed is actively involve in managing a team of engineers, supporting all engineering studies, modifications, aging studies and maintenance analysis. Mr. Ahmed had likewise worked as a Training Consultant being responsible with the design and implementation of various training programs for different organizational activities.

Mr. Ahmed was the **Project Manager** of **KNPC/KPC** for various certified programs for Kuwait Contractor Employees including **Electrical Program**, **Mechanical & Pipefitting Program**, **Welding & Fabrication Program** and the **Certified Process Operation Program**. Prior to this, he has been the **Project Manager** as well of **ADMA-OPCO's CAMS** long-term training projects for almost 9 years & Abu Dhabi Police for logistics project for 2 years. Earlier in his career, Mr. Ahmed had occupied several challenging roles with several large international companies as the **Project Manager**, **Contracts Manager**, **Systems Analyst**, **Training Branch Chief**, **Systems & Communication Engineer** and **Computer Programmer**. Further, he has travelled all over Europe, Asia and the Americas joining numerous conferences and workshops with international companies such as **IBM**, **System Science Corporation** (**SSC**) and **International Air Transport Association** (**IATA**).

Mr. Ahmed has a **Bachelor's** degree in **Mechanical Engineering** and a **Certified Trainer/Instructor**. Further, he has gained **Diplomas** on **Civil Aviation Engineering**, **Islamic Studies** and **Information Systems & Technology**. Moreover, he is a **Certified Internal Verifier** by **City & Guilds Level 4 Certificate** in Leading the Internal Quality **Assurance of Assessment Processes & Practice under the IQA Qualification (Internal Quality Assurance**) and a **Certified Assessor** by **City & Guilds Level 3 Award in Assessing Vocationally Related Achievement** under the **TAQA Qualification (Training**, **Assessment & Quality Assurance**) as well as a **Certified Trainer/Assessor/Internal Verifier** of the **Institute of Leadership & Management (ILM**), **UK**. Further, he has delivered numerous trainings, workshops and conferences and projects worldwide.



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<u>Course Program</u> The following program is planned for this course. However, the course instructor(s) may modify this program before or during the course for technical reasons with no prior notice to participants. Nevertheless, the course objectives will be always met:

Day 1:	Monday, 09 <sup>th</sup> of December 2024
0730 – 0800	Registration & Coffee
0800 - 0815	Welcome & Introduction
0815 - 0830	PRE-TEST
0830 - 0930	Management & Leadership
	<i>Quality Philosophies and Foundations</i> • <i>The Quality Management System</i>
0930 - 0945	Break
0945 - 1100	Management & Leadership (cont'd)
	ASQ Code of Ethics for Professional Conduct • Leadership Principles and
	Techniques
1100 – 1215	Management & Leadership (cont'd)
	<i>Facilitation Principles and Techniques</i> • <i>Communication Skills</i>
1215 – 1230	Break
1230 - 1400	Management & Leadership (cont'd)
	Customer Relations
	Improvement
1400 – 1420	Quiz
1420 – 1430	Recap
1430	Lunch & End of Day One

Day 2:	Tuesday, 10 <sup>th</sup> of December 2024
0730 – 0830	Review of Day 1
	The Quality System
0830 - 0930	<i>Elements of the Quality System</i> • <i>Documentation of the Quality System</i> •
	Quality Standards and other Guidelines
0930 - 0945	Break
0945 - 1100	The Quality System (cont'd)
	<i>Quality Audits</i> • <i>Cost of Quality</i> • <i>Quality Training</i>
1100 - 1230	Product, Process & Service Design
	Classification of Quality Characteristics • Design Inputs and Review •
	Technical Drawings and Specifications
1230 - 1245	Break
1245 - 1400	Product, Process & Service Design (cont'd)
	Verification & Validation • Reliability and Maintainability
1400 - 1420	Quiz
1420 - 1430	Recap
1430	Lunch & End of Day Two

Day 3:	Wednesday, 11 <sup>th</sup> of December 2024
0730 - 0830	Review of Day 2
0830 - 0930	Product & Process Control
	Methods • Material Control
0930 - 0945	Break
0945 – 1100	Product & Process Control (cont'd)
	Acceptance Sampling • Measurement and Test
1100 – 1230	Product & Process Control (cont'd)
	Metrology



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1230 - 1245	Break
1245 – 1400	Product & Process Control (cont'd)
1400 – 1420	Measurement System Analysis (MSA) Quiz
1420 - 1430	Recap
1430	Lunch & End of Day Three

Day 4:	Thursday, 12 <sup>th</sup> of December 2024
0730 - 0830	Review of Day 3
0830 - 0930	Continuous Improvement
0830 - 0930	Quality Control Tools
0930 - 0945	Break
0945 - 1100	Continuous Improvement (cont'd)
0945 - 1100	Quality Management and Planning Tools
1100 – 1230	Continuous Improvement (cont'd)
1100 - 1250	Continuous Improvement Methodologies • Lean Tools
1230 - 1245	Break
1245 1400	Continuous Improvement (cont'd)
1245 – 1400	Corrective Action • Preventive Action
1400 - 1420	Quiz
1420 - 1430	Recap
1430	Lunch & End of Day Four

Day 5:	Friday, 13 <sup>th</sup> of December 2024
0730 - 0800	Review of Day 4
0800 - 0930	Quantitative Methods & Tools
	Collecting and Summarizing Data • Quantitative Concepts • Probability
	Distributions • Statistical Decision Making
0930 - 0945	Break
	Quantitative Methods & Tools (cont'd)
0945 - 1100	Relationships Between Variables • Statistical Process Control (SPC) •
	Process and Performance Capability • Design and Analysis of Experiments
1100 – 1230	Risk Management
1100 - 1230	Risk Oversight • Risk Assessment
1230 - 1245	Break
1245 - 1345	Risk Management
1243 - 1543	Risk Control
1345 - 1400	Course Conclusion
1400 - 1415	POST-TEST
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

#### MOCK Exam

Upon the completion of the course, participants have to sit for a MOCK Examination similar to the exam of the Certification Body through Haward's Portal. Each participant will be given a username and password to log in Haward's Portal for the MOCK exam during the 7 days following the course completion. Each participant has only one trial for the MOCK exam within this 7-day examination window. Hence, you have to prepare yourself very well before starting your MOCK exam as this exam is a simulation to the one of the Certification Body.



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# Practical Sessions

This practical and highly-interactive course includes the following real-life case studies and exercises:-



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