COURSE OVERVIEW TM0760
Certified Quality Engineer (CQE)
American Society for Quality (ASQ)
ASQ-CQE Exam Preparation Training

Course Title
Certified Quality Engineer (CQE): American Society for Quality (ASQ) - ASQ-CQE Exam Preparation Training

Course Date/Venue
July 28-August 01, 2024/Executive Lounge, 25th Floor, Wyndham Grand Manama Hotel, Manama, Bahrain

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 quality system comprising of its elements, documentation, standards and other guidelines, quality 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 control comprising of methods, material control, acceptance sampling, measurement and test, metrology and measurement analysis system; and the continuous improvement using quality control tools, quality management and planning tools, continuous improvement methodologies, lean tools and corrective and preventive actions.

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®**). The **H-STK®** consists of a comprehensive set of technical content which includes **electronic version** of the course materials conveniently saved in a **Tablet PC**.*

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.

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: -

- 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.

- 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.

Training Fee
US$ 5,750 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Exam Fee
US$ 715 per Delegate + **VAT**.

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. **Drag Zic** is an **International Expert** in **Quality**, **Contracts & Project Management** with over **30 years** of extensive experience. His expertise mainly covers **Quality** Management, **Quality Control**, **Quality Assurance**, **Project & Contract** Management; **Planning**, **Scheduling**, **Budgeting & Cost Control**; **Document** Management, **Record** Management, **Leadership & Business**, **Performance** Management, **Customer Service** Management, **Quality** Management, **Risk** Management, **Data** Management **Systems**, **R&D** and **Research** Management, Analytical & Chemical Laboratory Management, Statistical Analysis of Laboratory Data, Statistical Method Validation & Laboratory Auditing, Sample Development & Preparation in Analytical Laboratory, Data Analysis Techniques, Laboratory Quality Management (ISO 17025), Applied Research & Technology, Basic Geology, Quality Assurance Assessment, Quantified Risk Assessment (**QRA**).

Further, he is also well-versed in **Seismic Monitoring Systems**, **Seismological Software** (**4di**, **Xmts**, **OptiNet** and **ErrMap**), **Data Analysis**, **Rock Mass Stability Analysis**, **Seismic Budget Planning & Productivity Improvement Analysis**, **HazMap**, **ISO Standards** as well as **Balance Scorecard**. He is currently the **Director** and **Principal Consultant** of **DRAMI** wherein he is responsible in formulating and executing the plans for applied research and technology transfer.

During Mr. Zic's career life, he had occupied several significant positions as the **Project Manager**, **Contract Manager**, **Programme Manager**, **Safety & Engineering Manager**, **Rock Engineering Manager**, **Laboratory Manager** and **Mine Seismologist** with different international companies.

Mr. Zic is a **Professional Natural Scientist** and holds a **Bachelor** degree in **Geophysics** and a **Diploma** in **Management Development Programme**. He is an active member of various professional engineering bodies internationally like the European Geosciences Union (**EGU**), the Canadian Institute of Mining (**CIM**), the European Association of Geoscientists and Engineers (**EAGE**) and the International Society for Rock Mechanics (**ISRM**).

Accommodation

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

Course Program

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: ***Sunday, 28th of July 2024***

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Management & Leadership*** *Quality Philosophies and Foundations ● The Quality Management System*
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)*** *Facilitation Principles and Techniques ● Communication Skills*
1215 – 1230	*Break*
1230 – 1400	***Management & Leadership (cont'd)*** *Customer Relations ● Supplier Management ● Barriers to Quality Improvement*
1400 – 1420	***Quiz***
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2: ***Monday, 29th of July 2024***

0730 – 0830	*Review of Day 1*
0830 – 0930	***The Quality System*** *Elements of the Quality System ● Documentation of the Quality System ● Quality Standards & other Guidelines*
0930 – 0945	*Break*
0945 – 1100	***The Quality System (cont'd)*** *Quality Audits ● Cost of Quality ● Quality Training*
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: ***Tuesday, 30th of July 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*
1230 – 1245	*Break*
1245 – 1400	***Product & Process Control (cont'd)*** *Measurement System Analysis (MSA)*
1400 – 1420	***Quiz***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4: ***Wednesday, 31st of July 2024***

0730 – 0830	*Review of Day 3*
0830 – 0930	***Continuous Improvement*** *Quality Control Tools*
0930 – 0945	*Break*
0945 – 1100	***Continuous Improvement (cont'd)*** *Quality Management and Planning Tools*
1100 – 1230	***Continuous Improvement (cont'd)*** *Continuous Improvement Methodologies ● Lean Tools*
1230 – 1245	*Break*
1245 – 1400	***Continuous Improvement (cont'd)*** *Corrective Action ● Preventive Action*
1400 – 1420	***Quiz***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5: ***Thursday, 01st of August 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*
0945 – 1100	***Quantitative Methods & Tools (cont'd)*** *Relationships Between Variables ● Statistical Process Control (SPC) ● Process and Performance Capability ● Design and Analysis of Experiments*
1100 – 1230	***Risk Management*** *Risk Fundamentals ● Risk Planning and Assessment*
1230 – 1245	*Break*
1245 – 1345	***Risk Management*** *Risk Treatment, Control, and Monitoring*
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.

Practical Sessions

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

Course Coordinator

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