

**COURSE OVERVIEW TM0760**  
**Certified QA/QC Engineer**

**Course Title**

Certified QA/QC Engineer

**Course Date/Venue**

August 11-15, 2024/Boardroom 1, Elite Byblos  
 Hotel Al Barsha, Sheikh Zayed Road, Dubai, 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 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 data; 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 data 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, sample video clips of the instructor’s actual lectures & practical sessions during the course 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/Organizational Excellence (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\$ 5,750** 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 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: -


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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.

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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.

### 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:



**Dr. Chris Le Roux**, PhD, MSc, BSc, PMI-PMP is a **Senior Project & Management Consultant** with over **45 years** of teaching, training and industrial experience. His expertise lies extensively in the areas of **Project & Contracts Management Skills, Project & Construction Management, Project Planning, Scheduling & Control, Project Management, Project Delivery & Governance Framework, Project Management Practices, Project Management Disciplines, Project Risk Management, Risk Identification Tools & Techniques, Project Life Cycle, Project Stakeholder & Governance, Project Management Processes, Project Integration Management, Project Management Plan, Project Work Monitoring & Control,**

**Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Quality Assurance, Project Human Resource Management, Project Communications Management, Contract Management, Tender Development, Contract Standards & Laws, Dispute Resolution & Risk Identification, Myers-Briggs Type Indicator (MBTI), Organization Development Consultation, Advanced Debriefing of Emotional Trauma, Interpersonal Motivation, Model Based Interviewing, Leadership Orientation Programme, Coaching & Motivation, Creative Thinking & Problem-Solving Techniques, Emotional Intelligence, Presentation Skills, Communication & Interpersonal Skills, Effective Communication & Influencing Skills, Effective Business Writing Skills, Writing Business Documents, Business Writing (Memo & Report Writing), Leadership & Team Building, Psychology of Leadership, Interpersonal Skills & Teamwork, Coaching & Mentoring, Innovation & Creativity, Office Management & Administration Skills, Controlling Your Time & Managing Stress, Crisis Management, Strategic Human Resources Management, Change Management, Negotiation Skills, Strategic Planning, Risk Analysis & Risk Management, Global Diverse & Virtual Teams Operation, Exceeding Customer Expectations, Corporate Governance Best Practice, Business Performance Management & Improvement, Building Environment of Trust & Commitment, Win-Win Negotiation Strategies, Quality Improvement & Resource Optimization, Neuro Linguistic Programming (NLP), Personal Resilience Developing, Effective Role Modelling & Development, Managing Dynamic Work Environments, Organizational Development, Career Management, Situation & Behaviour Analysis, Interpersonal Motivation Skills, Inventory Management and Financial Administration.** Further, he is also well-versed in Water Supply System Security, Vulnerability & Terrorism, Integrated Security Systems, Incident Threat Characterization & Analysis, Physical Security Systems, Security Crisis, Security Emergency Plan, Command & Control System, Preventive Actions and Situation Analysis. He was the **Psychologist & Project Manager** wherein he was responsible in the project management and private psychology practices.

During his career life, Dr. Le Roux has gained his academic and field experience through his various significant positions and dedication as the **Director, Medico Legal Assessor Psychologist, Training & Development General Manager, Project Manager, Account Manager, Commercial Sales Manager, Manager, Sales Engineer, Project Specialist, Psychology Practitioner, Senior HR Consultant, Senior Lecturer, Senior Consultant/Trainer, Business Consultant, Assistant Chief Education Specialist, ASI Coordinator, Part-time Lecturer/Trainer, PMP & Scrum Trainer, Assessor & Moderator, Team Leader, Departmental Head, Technical Instructor/Qualifying Technician, Apprentice Electrician: Signals and Part-Time Electrician** from various companies and universities such as the South African Railway (SAR), Department of Education & Culture, **ESKOM**, Logistic Technologies (Pty. Ltd), Human Development: Consulting Psychologies (HDCCP) & IFS, Mincon, Eagle Support Africa, Sprout Consulting, UKZN, Grey Campus, Classis Seminars, CBM Training, just to name a few.

Dr. Le Roux has a **PhD in Commerce Major in Leadership in Performance & Change**, a **Master's degree in Human Resource Management**, a **Bachelor's degree (with Honours) in Industrial Psychology**, a National Higher Diploma and a National Technical Diploma in **Electrical & Mechanical Engineering**. Further, he is a **Certified Project Management Professional (PMI-PMP)**, a **Certified Scrum Master Trainer** by the VMEdU, a **Certified Instructor/Trainer** and a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)**. Moreover, he is a **Registered Industrial Psychologist** by the Health Professions Council of South Africa (HPCSA), a **Registered Educator** by the South African Council for Educators (SACE) and a **Registered Facilitator, Assessor & Moderator** with Education, Training and Development Practices (ETDP) SETA. He has further delivered numerous trainings, courses, seminars, conferences and workshops globally.

### 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, 11<sup>th</sup> of August 2024**

0730 – 0800	Registration & Coffee
0800 – 0815	Welcome & Introduction
0815 – 0830	<b>PRE-TEST</b>
0830 – 0930	<b>Management &amp; Leadership</b> Quality Philosophies and Foundations • The Quality Management System
0930 – 0945	Break
0945 – 1100	<b>Management &amp; Leadership (cont'd)</b> ASQ Code of Ethics for Professional Conduct • Leadership Principles and Techniques
1100 – 1215	<b>Management &amp; Leadership (cont'd)</b> Facilitation Principles and Techniques • Communication Skills
1215 – 1230	Break
1230 – 1400	<b>Management &amp; Leadership (cont'd)</b> Customer Relations • Supplier Management • Barriers to Quality Improvement
1400 – 1420	<b>Quiz</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day One

#### **Day 2: Monday, 12<sup>th</sup> of August 2024**

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

#### **Day 3: Tuesday, 13<sup>th</sup> of August 2024**

0730 – 0830	Review of Day 2
0830 – 0930	<b>Product &amp; Process Control</b> Methods • Material Control
0930 – 0945	Break
0945 – 1100	<b>Product &amp; Process Control (cont'd)</b> Acceptance Sampling • Measurement and Test
1100 – 1230	<b>Product &amp; Process Control (cont'd)</b> Metrology



1230 – 1245	Break
1245 – 1400	<b>Product &amp; Process Control (cont'd)</b> Measurement System Analysis (MSA)
1400 – 1420	<b>Quiz</b>
1420 – 1430	<b>Recap</b>
1430	Lunch & End of Day Three

**Day 4: Wednesday, 14<sup>th</sup> of August 2024**

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

**Day 5: Thursday, 15<sup>th</sup> of August 2024**

0730 – 0800	Review of Day 4
0800 – 0930	<b>Quantitative Methods &amp; Tools</b> Collecting and Summarizing Data • Quantitative Concepts • Probability Distributions • Statistical Decision Making
0930 – 0945	Break
0945 – 1100	<b>Quantitative Methods &amp; Tools (cont'd)</b> Relationships Between Variables • Statistical Process Control (SPC) • Process and Performance Capability • Design and Analysis of Experiments
1100 – 1230	<b>Risk Management</b> Risk Oversight • Risk Assessment
1230 – 1245	Break
1245 – 1345	<b>Risk Management</b> Risk Control
1345 – 1400	<b>Course Conclusion</b>
1400 – 1415	<b>POST-TEST</b>
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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