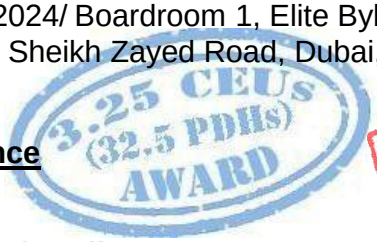
COURSE OVERVIEW TM0092
Certified Quality Technician (CQT)
American Society for Quality (ASQ)
Exam Preparation Training

Course Title
Certified Quality Technician (CQT): American Society for Quality (ASQ) - Exam Preparation Training

Course Date/Venue
October 13-17, 2024/ Boardroom 1, Elite Byblos Hotel Al Barsha, Sheikh Zayed Road, Dubai, UAE



Course Reference
TM0092

Course Duration/Credits
Five days/3.25 CEUs/32.5 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 provide participants with a detailed and an up-to-date overview of Certified Quality Technician (CQT): American Society for Quality (ASQ). It covers the quality concepts and tools; the quality concepts, quality tools and ASQ code of ethics for professional conduct; the quality principles for products and processes, quality standards, requirements and specifications and cost of quality (COQ); the seven basic quality tools; the cause and effect diagrams, flowcharts (process maps), check sheets, pareto charts, scatter diagrams, control charts and histograms; the problem-solving techniques, lean and continuous improvement techniques; and the statistical techniques; the general concepts, calculations and control charts.

Further, the course will also discuss the measuring central tendency, dispersion, confidence levels, confidence limits and probability; control limits vs. specification limits, variables charts, attributes charts, process capability measures, common & special cause variation and data plotting; the metrology and calibration covering the types of measurement and test equipment (M&TE), control & maintenance of M&TE and calibration of M&TE; hand tools, gauges, optical tools, coordinate measuring machines (CMM), electronic measuring equipment, weights, balances and scales, hardness testing equipment, surface plate methods and equipment, surface analyzers, force measurement tools, angle measurement tools, color measurement tools and automated in-line inspection methods; and the intervals, results, error and hierarchy of standards.

During this interactive course, participants will learn the inspection and test; the blueprint reading and interpretation, inspection concepts, techniques and processes, sampling and nonconforming material; the blueprint symbols and components, geometric dimensioning and tolerancing (GD&T) and classification of product defect characteristics; the types of measurements, gauge selection, measurement systems analysis (MSA), rounding rules, conversion of measurements, inspection points inspection error, product traceability and certificates of compliance (COC) and analysis (COA); the nondestructive testing (NDT) techniques and destructive testing techniques; the quality audits; the types and terminology, components, tools and techniques and communication tools; and the risk management; the mitigation, corrective action and preventive action.

Course Objectives

Upon the successful completion of this course, each participant will be able to:-

- Prepare for the next ASQ - CQT exam and have enough knowledge and skills to pass such exam in order to be certified as a "*Certified Quality Technician (CQT)*" from an internationally recognized Accreditation Body (American Society for Quality – ASQ)
- Discuss the quality concepts and tools covering the quality concepts, quality tools and ASQ code of ethics for professional conduct
- Explain quality principles for products and processes, quality standards, requirements and specifications and cost of quality (COQ)
- Identify the seven basic quality tools covering the cause and effect diagrams, flowcharts (process maps), check sheets, pareto charts, scatter diagrams, control charts and histograms
- Employ problem-solving techniques, lean and continuous improvement techniques
- Apply statistical techniques including the general concepts, calculations and control charts
- Measure central tendency, dispersion, confidence levels, confidence limits and probability
- Recognize control limits vs. specification limits, variables charts, attributes charts, process capability measures, common & special cause variation and data plotting
- Carryout metrology and calibration covering the types of measurement and test equipment (M&TE), control & maintenance of M&TE and calibration of M&TE
- Employ hand tools, gauges, optical tools, coordinate measuring machines (CMM), electronic measuring equipment, weights, balances and scales, hardness testing equipment, surface plate methods and equipment, surface analyzers, force measurement tools, angle measurement tools, color measurement tools and automated in-line inspection methods
- Calibrate intervals, results, error and hierarchy of standards
- Employ inspection and test including the blueprint reading and interpretation, inspection concepts, techniques and processes, sampling and nonconforming material
- Recognize blueprint symbols and components, geometric dimensioning and tolerancing (GD&T) and classification of product defect characteristics
- Identify types of measurements, gauge selection, measurement systems analysis (MSA), rounding rules, conversion of measurements, inspection points inspection error, product traceability and certificates of compliance (COC) and analysis (COA)

- Recognize nondestructive testing (NDT) techniques and destructive testing techniques
- Discuss quality audits covering the types and terminology, components, tools and techniques and communication tools
- Explain risk management including the mitigation, corrective action and preventive action

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 provides an overview of all significant aspects and considerations of certified quality technician (CQT) for quality technicians, quality inspectors, quality control professionals, manufacturing personnel, process improvement team members, entry-level quality professionals and those who are responsible for performing quality inspections, measurements, and tests, as well as assisting in process improvements and problem-solving related to quality issues.

Exam Eligibility & Structure

- You must have four years of on-the-job experience in one or more of the areas of the Certified Quality Technician Body of Knowledge
- You must have worked in a full-time, paid role
- If you are now or were previously certified by ASQ as:-
  - Quality Engineer
  - Quality Auditor
  - Reliability Engineer
  - Software Quality Engineer or Quality Manager
  - Experience used to qualify for certification in these fields applies to certification as a Quality Technician
- Candidate who have completed a degree from a college, university, or technical school will have part of the four-year experience requirement waived, as follows (only one of these waivers may be claimed):-
  - Certification through the Quality Technology program of a community college or vocational school — one year waived
  - Associate's degree–two years waived
  - Bachelor's, Master's or doctorate degree–three years waived

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

Training Methodology

This interactive training course includes the following training methodologies as a percentage of the total tuition hours:-

30% Lectures
20% Workshops & Work Presentations
30% Case Studies & Practical Exercises
20% Software, Simulators & 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 **3.25 CEUs** (Continuing Education Units) or **32.5 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.

Course 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.

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:

(1) Dr. Chris Le Roux, PhD, MSc, BSc, PMI-PMP, is a **Senior Management Consultant** with over **45 years** of teaching, training and industrial experience. His expertise lies extensively in the areas of **Quality** Management, **Reliability** Fundamentals, **Risk** Management Analysis, **Probability & Statistics**, **Quality Audits**, **Leadership** Skills, **Presentation** Skills, **Communication & Interpersonal** Skills, Effective **Communication & Influencing** Skills, **Quality Improvement & Resource** Optimization, Effective **Business Writing Skills**, **Creative Thinking & Problem-Solving** Techniques, **Emotional Intelligence**, **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, **Contract** Management, **Tender** Development, **Contract** Standards & Laws, **Dispute Resolution** & **Risk** Identification, 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, 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, **Financial** Administration, **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 and **Project Communications** Management. 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 (HDCP) & 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 always be met:

Day 1

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Quality Concepts & Tools: Quality Concepts*** *Customers & Suppliers ● Quality Principles for Products & Processes ●*

	Quality Standards, Requirements & Specifications ● Cost of Quality (COQ)
0930 – 0945	*Break*
0945 – 1100	***Quality Concepts & Tools: Quality Tools*** *The Seven Basic Quality Tools (Cause & Effect Diagrams, Flowcharts (Process Maps), Check Sheets, Pareto Charts, Scatter Diagrams, Control Charts, Histograms) ● Problem-Solving Techniques ● Six Sigma ● Lean ● Continuous Improvement Techniques*
1100 – 1230	***Quality Concepts & Tools: ASQ Code of Ethics for Professional Conduct***
1230 – 1245	*Break*
1245 – 1420	***Statistical Techniques: General Concepts*** *Terminology ● Frequency Distributions*
1420 – 1430	***Recap***
1430	*End of Day One*

Day 2

0730 – 0830	*Review of Day 1*
0830 – 0930	***Statistical Techniques: Calculations*** *Measures of Central Tendency ● Measures of Dispersion ● Confidence Levels ● Confidence Limits ● Probability*
0930 – 0945	*Break*
0945 – 1100	***Statistical Techniques: Control Charts*** *Control Limits Vs. Specification Limits ● Variables Charts ● Attributes Charts ● Process Capability Measures ● Common & Special Cause Variation ● Data Plotting*
1100 – 1230	***Metrology & Calibration: Types of Measurement & Test Equipment (M&TE)*** *Hand Tools ● Gauges ● Optical Tools ● Coordinate Measuring Machines (CMM) ● Electronic Measuring Equipment ● Weights, Balances & Scales ● Hardness Testing Equipment ● Surface Plate Methods & Equipment ● Surface Analyzers ● Force Measurement Tools ● Angle Measurement Tools ● Color Measurement Tools ● Automated In-Line Inspection Methods*
1230 – 1245	*Break*
1245 – 1420	***Metrology & Calibration: Control & Maintenance of M&TE*** *M&TE Identification, Control & Maintenance ● Customer-Supplied M&TE*
1420 – 1430	***Recap***
1430	*End of Day Two*

Day 3

0730 – 0830	*Review of Day 2*
0830 – 0930	***Metrology & Calibration: Calibration of M&TE*** *Calibration Intervals ● Calibration Results ● Calibration Error ● Hierarchy of Standards*
0930 – 0945	*Break*
0945 – 1100	***Inspection & Test: Blueprint Reading & Interpretation*** *Blueprint Symbols & Components ● Geometric Dimensioning & Tolerancing (GD&T) ● Classification of Product Defect Characteristics*
1100 – 1230	***Inspection & Test: Inspection Concepts*** *Types of Measurements ● Gauge Selection ● Measurement Systems Analysis (MSA) ● Rounding Rules ● Conversion of Measurements ● Inspection Points Inspection Error ● Product Traceability ● Certificates of Compliance (COC) &*

	Analysis (COA)
1230 – 1245	*Break*
1245 – 1420	***Inspection & Test: Inspection Techniques & Processes*** *Nondestructive Testing (NDT) Techniques ● Destructive Testing Techniques ● Other Testing Techniques*
1420 – 1430	***Recap***
1430	*End of Day Three*

Day 4

0730 – 0830	*Review of Day 3*
0830 – 0930	***Inspection & Test: Sampling*** *Sampling Characteristics ● Sampling Types ● Selecting Samples from Iots*
0930 – 0945	*Break*
0945 – 1100	***Inspection & Test: Nonconforming Material*** *Identifying & Segregating ● Material Review Process*
1100 – 1230	***Quality Audits: Audit Types & Terminology***
1230 – 1245	*Break*
1245 – 1330	***Quality Audits: Audit Components***
1330 - 1420	***Quality Audits: Audit Tools & Techniques***
1420 – 1430	***Recap***
1430	*End of Day Four*

Day 5

0730 – 0800	*Review of Day 4*
0800 – 0930	***Quality Audits: Audit Communication Tools***
0930 – 0945	*Break*
0945 – 1100	***Risk Management: Risk Assessment & Mitigation***
1100 – 1230	***Risk Management: Corrective Action***
1230 – 1245	*Break*
1245 – 1345	***Risk Management: Preventive Action***
1345 – 1400	***Course Conclusion***
1400 – 1415	***POST-TEST***
1415 – 1430	*Presentation of Course Certificates*
1430	*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 real-life case studies and exercises:-

Course Coordinator

Mari Nakintu, Tel: +971 2 30 91 714, Email: mari1@haward.org