



FMM Institute (475427-W)

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| TIN: C10626805080 | SST: W10-1901-32000105

Training Provider ID:
475427W_PENANG

Training Programme
No:
10001382376

FMM Certified Quality Engineer (G18)

Date: 19 July – 6 December 2025

SBL Khas Scheme - Claimable from HRDC

This FMM Certified Quality Engineer is specially developed to cultivate workforce proficiency in the principles and practices of Quality Engineering and Management. This course will help to enhance the ability to use quality engineering and management techniques in implementing an effective quality systems or programme in an organisation.

Course Content

Module I : CQE Introduction, Management and Leadership

- What is ASQ CQE? Certified Quality Engineer expectation
- Examination format, structure & requirements, marking scheme and results notification.
- ASQ membership and ASQ CQE certification fees
- Preparation for ASQ CQE examination (DOs and DON'Ts)
- Quality Philosophies and Foundations

Quality Management Systems 1 (QMS 1)

- Strategic planning
- Deployment techniques
- ASQ Code of Ethics for Professional Conduct
- Leadership Principles and Techniques
- Facilitation Principles and Techniques
- Communication Skills
- Customer Relations
- Supplier Management
- Barriers to Quality Improvement

Quality Management Systems 2 (QMS 2)

- The Quality Systems
- Elements of the Quality Systems
- Documentation of the Quality Systems
- Quality Standard and Other Guidelines

Module II : The Quality Systems

- Quality Auditing, Type of Audits
- Roles and responsibilities in Audits
- Audit planning and implementation
- Audit reporting and follow-up
- Quality Information Systems (QIS)
- Cost of Quality (COQ)

Module III : Product and Process Design

- Reliability and Risk Management
- Classification of Quality Characteristics
- Design Inputs and Reviews
- Technical Drawings and Specifications
- Design Verification
- Reliability and Maintainability
- Predictive and Preventive Maintenance Tools
- Reliability and Maintainability Indices
- Bath Tub Curve
- Reliability / Safety / Hazards Assessment Tools
- Failure Mode and Effects Analysis (FMEA)

Module IV : Product and Process Control

- Product and Process Tools
- Material Control – Identification, status and traceability
- Material segregation and classification of defects
- Material Review Board (MRB)
- Acceptance Sampling - Concepts
- Sampling standards and plans
- Sample techniques – Sample integrity
- Measurement, Metrology and Calibration
- Measurement and Test
- Measurement Tools / Measurement Types – Destructive and Non Destructive Testing
- Science of Measurement - Metrology
- Measurement System Analysis (MSA)

Module V : Continuous Improvement

- 7 Quality Control Tools
- 7 New Quality Control Tools (7 Management & Planning Tools)
- Continuous Improvement Techniques
- Corrective Actions
- Preventive Actions

Module VI : Quantitative Methods and Tools

- Inferential Statistics, Collecting and Summarizing Data
- Types of Data, Measurement Scales, Data Collection Methods, Data Accuracy, Descriptive Statistics, Graphical Methods for Depicting Relationships and Distributions
- Quantitative Methods – Terminology, Drawing Statistical Conclusions, Probability Terms & Concepts, Continuous and Discrete Probability Distributions
- Statistical Decision-Making – Point Estimates and Confidence Intervals, Hypothesis Testings, Paired Comparison Tests, Goodness-of-Fit Tests, Analysis of Analysis (ANOVA), Contingency Tests
- Relationship between Variables – Linear Regression, Simple Linear Regression and Time-Series Analysis
- Statistical Process Control (SPC) – Objectives and benefits, common and special causes, selection variable, rational sub-grouping, control charts, charts analysis, Pre-control charts
- Process and Performance and Capability – Process capability studies, Process Performance vs. specifications, Process Capability and Performance Indices
- Design and Analysis of Experiment (DOE) – Terminology, Planning and Organizing Experiments, Design Principles
- One factor experiments, Two factor experiments, Full factorial experiments, Two levels fractional experiments

**COMPLIMENTARY
COPY
JURAN QUALITY
HANDBOOK**



FMM Certified Quality Engineer

Course Objectives

This programme will enable participants to:

- Acquire an in-depth knowledge and skills in applying the principles of Quality Engineering and Management in their workplace;
- Enhance the ability to use Quality Engineering and Management techniques to implement an effective quality system or programme;
- Create opportunities for career advancement and development in Quality Engineering and Management within an organisation; and
- Prepare participants for the Certified Quality Engineering Examination of the American Society for Quality (ASQ).

Entry Requirements

Candidates must be proficient in the English Language and meet the following entry requirements:

- Degree in any discipline and at least 4 years working experience in Quality related field, or
- Diploma in any discipline and at least 6 years of working experience in Quality related field, or
- Certificate in any discipline and at least 7 years working experience in Quality related field, or
- Minimum SPM/MCE/SPVM qualification and at least 8 years working experience in Quality related field

Who Should Attend

This program is meant for Supervisors, Executives, Engineers and Managers who have a few years working experience in quality related field.

Certification

Participants who have attended at least 80% of the programme will be awarded a Certificate of Attendance and those who passed all the examinations will be awarded the **FMM Certified Quality Engineer** certificate by FMM Institute.

Candidates who meet the entry requirements of ASQ are eligible to sit for the **American Society of Quality (ASQ)** Certified Quality Engineer Examination.

Course Structure

Total number of contact days: 19 days/140 hours

Inclusive of Review & discussion Session

Evaluation

Examination: 100% (Objective questions)

Administrative Details

Date: 19 July – 6 December 2025

Venue: Remote Online via Zoom

Course Fees

FMM Members - RM5000.00 /per participant
(**RM5,400.00 inclusive 8% SST**)*

Others - RM5,800.00/ per participant
(**RM6,264.00 inclusive 8% SST**)*

** A 8% SST will be imposed for training programmes scheduled from March 1, 2024 onwards.*

(Complimentary: Training materials, JURAN Quality Handbook and certificate are provided for participants)

For further information, kindly contact: Sharrlini / Remes Tel: 04 – 399 2057

Fax : 04-399 4863 E-mail : sharrlini@fmm.org.my / remes@fmm.org.my

Registration Form

Completed registration form, faxed, mailed or e-mailed to FMM Institute would be deemed as confirmed. There will be no refund or cancellation within 2 days prior to the programme, 50% refund for cancellation between 3 – 6 days and full refund for cancellation 7 days prior to the programme. However, replacement can be accepted at no additional cost. The FMM Institute reserves the right to cancel or re-schedule the above programme and all efforts will be taken to inform participants of the changes. *Closing date for registration is on **11 July 2025**.*

A. PARTICIPANT PARTICULARS (To be completed in BLOCK LETTERS)

Full Name (Mr./Ms): _____ NRIC No. : _____

Designation: _____ E-mail Address: _____

Tel No. : _____ Tel No. (O) : _____ Fax No: _____

Qualification: ☐ SPM ☐ Certificate ☐ Diploma ☐ Degree ☐ Others: _____

Working Experience/Years: 1) _____ 2) _____

B. SPONSORSHIP [Please Tick (✓)]

☐ Company Sponsored

☐ Self Sponsored

C. SUBMITTED BY (To be filled if sponsored by company)

Name (Mr./Ms): _____ Designation: _____

Name of Company: _____ FMM Membership No: _____

Address: _____ Tel No. : _____

Fax. No.: _____

E-mail Address: _____

SST No. : _____ New ROC No. : _____

TIN No. : _____ Grant ID: _____

FMM Certified Quality Engineer (CQE)

Date : 19 July – 6 December 2025

Time : 9.00am -5.00pm

as at 4 June 2025

No.	Date	Day	Module	Topic	Trainer
1.	19 July	Sat	Management & Leadership	ASQ CQE Intro + Quality Philosophies & Foundations	Mr. Dev Prasad
2.	20 July	Sun	Product & Process Design	Reliability & Risk Management (1)	Mr. Dev Prasad
3.	26 July	Sat	Product & Process Design	Reliability & Risk Management (2)	Mr. Dev Prasad
4.	27 July	Sun	Quantitative Methods & Tools	Statistical Process Control (1)	Mr. Dev Prasad
5.	9 August	Sat	Quantitative Methods & Tools	Statistical Process Control (2)	Mr. Dev Prasad
6.	10 August	Sun	The Quality System	Quality Management System (1)	Mr. Dev Prasad
7.	23 August	Sat	The Quality System	Quality Management System (2)	Mr. Dev Prasad
8.	24 August	Sun	Quantitative Methods & Tools	Inferential Statistics & Distribution (1)	Mr. Dev Prasad
9.	13 Sept	Sat	Quantitative Methods & Tools	Inferential Statistics & Distribution (2)	Mr. Dev Prasad
10.	14 Sept	Sun	Product & Process Control	Inferential Statistics & Distribution (3)	Mr. Dev Prasad
11.	20 Sept	Sat	Product & Process Control	Acceptance Sampling Plan (1)	Mr. Dev Prasad
12.	21 Sept	Sun	Product & Process Control	Measurement, Metrology & Calibration	Mr. Dev Prasad
13.	4 October	Sat	Management & Leadership	Quality Information System + Cost of Quality	Mr. Dev Prasad
14.	5 October	Sun	Management & Leadership	Quality Auditing	Mr. Dev Prasad
15.	11 October	Sat	The Quality System	Quality Control Tools, Quality Mgmt & Planning Tools	Mr. Dev Prasad
16.	12 October	Sun	Quantitative Methods & Tools	Continuous Improvement Techniques, CA & PA	Mr. Dev Prasad
17.	1 Nov	Sat	Quantitative Methods & Tools	Design of Experiment (1)	Mr. Dev Prasad
18.	2 Nov	Sun	Quantitative Methods & Tools	Design of Experiment (2)	Mr. Dev Prasad
	29 Nov	Sat	<u>9am-2pm</u>	FMM Internal Examination (Compulsory)- Objective Questions	
19.	6 Dec	Sun	<u>9am-5pm</u>	Review & Discussion Session for ASQ CQE Examination	Mr. Dev Prasad

**All information provided is correct at the time of printing. The FMM Institute reserves the right to revise the information provided. All efforts will be taken to inform participants of these changes.*

TRAINER
FMM Certified Quality Engineer

Mr. Dev Prasad (760729-08-5371) holds a Bachelor of Engineering Degree in Electrical Engineering from University Technology Malaysia. Mr. Dev has been involved in various technical projects to optimize and improve manufacturing processes, reduction in defects towards quality and productivity improvements, Lean Manufacturing and Six Sigma at a Multinational company in Penang. Mr. Dev is an American Society of Quality Certified Quality Engineer (No: 45592) a, ASQ Certified Six Sigma Black Belt (No: 3218) and TRIZ (Structured Innovation) Green Belt, Pretium LLC, US (No: SIT2-0037-10C). He is also a Certified Supplier Auditor (by SMMT) for ISO-TS16949: 2002 Quality System. Currently, he is a Senior Member of American Society Of Quality (ASQ) (No: 63458142), Senior Member of Society of Manufacturing Engineers (SME, US, No: 13889202), Member of Board of Engineers Malaysia (BEM, No: 59687A [Electronics]) and Member of Institution of Engineers Malaysia (IEM, No: G38860 [Electronics]).