

COURSE OVERVIEW RE0085

Certified Advanced Maintenance Management (CAMM)

Course Title

Certified Advanced Maintenance Management (CAMM)

Course Date/Venue

November 30-December 04, 2025/Meeting Plus 6, City Centre Rotana, Doha, Qatar

Course Reference

RE0085

Course Duration/Credits

Five days/3.0 CEUs/30 PDHs



Course Description



This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our state-of-the-art simulators.

This course is designed to provide participants with a detailed and up-to-date overview of Certificate in Advanced Maintenance Management (CAMM). It covers the fundamentals of maintenance including the roles and responsibilities of a maintenance manager; the types of maintenance covering preventive, predictive, reactive and proactive; the asset life cycle comprising of design, procurement, installation, maintenance and decommissioning; and the reliability-centered maintenance (RCM), preventive and predictive maintenance, scheduling, checklists, vibration analysis and infrared thermography.



Further, the course will also discuss the maintenance strategy and planning, work planning and scheduling, resource allocation and inventory and spares management; the maintenance key performance indicators KPIs covering downtime metrics and costs and ROI; the reliability engineering and modelling; the root cause analysis (RCA), fishbone diagrams and failure mode analysis; and the maintenance safety protocols, safety guidelines, personal protective equipment (PPE), hazard identification and risk assessment.





During this interactive course, participants will learn the incident reporting and management and emergency response planning; the features of maintenance management software; the implementation, data input and management of computerized maintenance management system (CMMS); the internet of things (IoT) in maintenance, digital twin technology and cybersecurity concerns; the data analytics and decision making, leadership skills for maintenance managers and communication skills; and the team building and motivation, training and development and future trends in maintenance management.

Course Objectives

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

- Apply and gain an in-depth knowledge on advanced maintenance management
- Discuss the fundamentals of maintenance including the roles and responsibilities of a maintenance manager
- Identify the types of maintenance covering preventive, predictive, reactive and proactive
- Illustrate asset life cycle comprising of design, procurement, installation, maintenance and decommissioning
- Carryout reliability-centered maintenance (RCM), preventive and predictive maintenance, scheduling, checklists, vibration analysis and infrared thermography
- Employ maintenance strategy and planning, work planning and scheduling, resource allocation and inventory and spares management
- Apply maintenance key performance indicators (KPIs) covering downtime metrics and costs and ROI
- Illustrate reliability engineering and modelling, root cause analysis (RCA), fishbone diagrams and failure mode analysis
- Implement maintenance safety protocols, safety guidelines, personal protective equipment (PPE), hazard identification and risk assessment
- Carryout incident reporting and management and emergency response planning
- Discuss the features of maintenance management software including the implementation, data input and management of computerized maintenance management system (CMMS)
- Identify internet of things (IoT) in maintenance, digital twin technology and cybersecurity concerns
- Apply data analytics and decision making, leadership skills for maintenance managers and communication skills
- Employ team building and motivation, training and development and future trends in maintenance management

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 provides an overview of all significant aspects and considerations of advanced maintenance management for maintenance managers, facility managers, operations managers, reliability engineers, maintenance engineers, maintenance planners and schedulers, maintenance supervisors, and maintenance technicians.

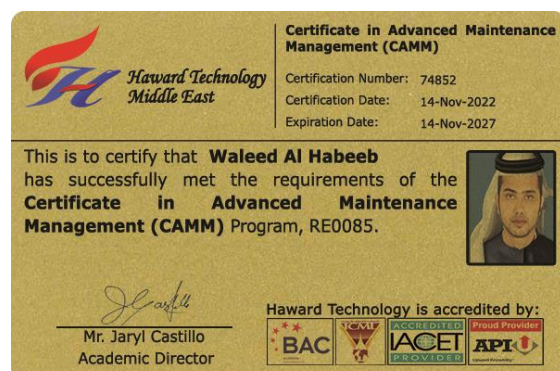
Course Certificate(s)

- (1) Internationally recognized Competency Certificates and Plastic Wallet Cards will be issued to participants who completed a minimum of 80% of the total tuition hours and successfully passed the exam at the end of the course. Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:





- (2) Official Transcript of Records will be provided to the successful delegates with the equivalent number of ANSI/IACET accredited Continuing Education Units (CEUs) earned during the course.

* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *

 **Haward Technology Middle East**
Continuing Professional Development (HTME-CPD)

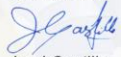
CEUs

CEU Official Transcript of Records

TOR Issuance Date: 14-Nov-22
HTME No. 74852
Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
RE0085	Certificate in Advanced Maintenance Management (CAMP)	November 10-14, 2022	30	3.0

Total No. of CEU's Earned as of TOR Issuance Date **3.0**

TRUE COPY

Jaryl Castillo
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 2201 Cooperative Way, Suite 600, Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1-2013 Standard which is widely recognized as the standard of good practice internationally. As a result of their Authorized Provider membership status, Haward Technology is authorized to offer IACET CEUs for programs that qualify under the ANSI/IACET 1-2013 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 Association 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 is accredited by

P.O. Box 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 714 | E-mail: info@haward.org | Website: www.haward.org

* Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology * CEUs * Haward Technology *



Certificate Accreditations

Haward's certificates are accredited by the following international accreditation organizations:

-  British Accreditation Council (BAC)

Haward Technology is accredited by the **British Accreditation Council** for **Independent Further and Higher Education** as an **International Centre**. Haward's certificates are internationally recognized and accredited by the British Accreditation Council (BAC). 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.

-  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.

Course Fee

US\$ 6,000 per Delegate. 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:



Mr. Andrew Ladwig is a **Senior Process & Mechanical Maintenance Engineer** with over **25 years** of extensive experience within the **Oil & Gas, Refinery, Petrochemical & Power** industries. His expertise widely covers in the areas of **Ammonia Manufacturing & Process Troubleshooting, Distillation Towers, Crude Oil Distillation, Ammonia Storage & Loading Systems, Operational Excellence in Ammonia Plants, Fertilizer Storage Management (Ammonia & Urea), Fertilizer**

Manufacturing Process Technology, Sulphur Recovery, Phenol Recovery & Extraction, Refining Process & Petroleum Products, Refinery Planning & Economics, Hydrotreating & Hydro-processing, Separators in Oil & Gas Industry, Gas Testing & Energy Isolations, Industrial Liquid Mixing, Extractors, Fractionation, Water Purification, Water Transport & Distribution, Environmental Emission Control, Process Plant Troubleshooting & Engineering Problem Solving, Process Plant Performance, Plant Startup & Shutdown, Process Troubleshooting Techniques and Oil & Gas Operation/Surface Facilities. Further, he is also well-versed in **Rotating Machinery (BRM), Rotating Equipment Operation & Troubleshooting, Root Cause Analysis (RCA), Process Plant Shutdown, Turnaround & Troubleshooting, Planning & Scheduling Shutdowns & Turnarounds, Optimizing Equipment Maintenance & Replacement Decisions, Maintenance Planning & Scheduling, Material Cataloguing, Maintenance, Reliability & Asset Management Best Practices, Storage Tanks Operations & Measurements, Tank Inspection & Maintenance, Pressure Vessel Operation, Flare & Relief System, Flaring System Operation, PSV Inspection & Maintenance, Centrifugal & Reciprocating Compressor, Screw Compressor Troubleshooting, Heat Exchanger Overhaul & Testing, Pipe Stress Analysis, Control Valves & Actuators, Vent & Relief System, Centrifugal & Reciprocating Pump Installation & Repair, Heat Exchanger Troubleshooting & Maintenance, Steam Trapping & Control, Control & ESD System and Detailed Engineering Drawings, Codes & Standards.**

During his career life, Mr. Ladwig has gained his practical experience through his various significant positions and dedication as the **Mechanical Engineer, Project Engineer, Reliability & Maintenance Engineer, Maintenance Support Engineer, Process Engineer, HSE Supervisor, Warehouse Manager, Quality Manager, Business Analyst, Senior Process Controller, Process Controller, Safety Officer, Mechanical Technician, Senior Lecturer and Senior Consultant/Trainer** for various companies such as the **Sasol Ltd., Sasol Wax, Sasol Synfuels**, just to name a few.

Mr. Ladwig has a **Bachelor's degree in Chemical Engineering** and a **Diploma in Mechanical Engineering**. Further, he is a **Certified Instructor/Trainer, a Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)** and has delivered various trainings, workshops, seminars, courses and conferences internationally.



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 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: Sunday, 30th of November 2025

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0930	Maintenance Management Fundamentals <i>Defining Maintenance Management • History & Evolution</i>
0930 – 0945	<i>Break</i>
0945 – 1045	Role & Responsibilities of a Maintenance Manager <i>Job Descriptions • Expectations & Goals</i>
1045 – 1145	Types of Maintenance <i>Preventive • Predictive • Reactive • Proactive</i>
1145 – 1200	<i>Break</i>
1200 – 1300	Asset Life Cycle <i>Design • Procurement • Installation • Maintenance • Decommission</i>
1300 – 1420	Industry Best Practices <i>ISO Standards • Reliability-Centered Maintenance (RCM)</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day One</i>

Day 2: Monday, 01st of December 2025

0730 – 0830	Preventive Maintenance (PM) <i>Scheduling • Checklists</i>
0830 – 0930	Predictive Maintenance (PdM) <i>Vibration Analysis • Infrared Thermography</i>
0930 – 0945	<i>Break</i>
0945 – 1045	Maintenance Strategy & Planning <i>Maintenance Strategy • Work Planning • Work Scheduling</i>
1045 – 1145	Resource Allocation <i>Budgeting • Manpower</i>
1145 – 1200	<i>Break</i>
1200 – 1245	Inventory & Spares Management <i>Stock Levels • Vendor Management</i>
1245 – 1420	Maintenance Key Performance Indicators (KPIs) <i>Downtime Metrics • Costs & ROI</i>
1420 – 1430	Recap
1430	<i>Lunch & End of Day Two</i>



Day 3: Tuesday, 02nd of December 2025

0730 – 0830	Reliability Engineering <i>Definitions and Concepts • Reliability Modeling</i>
0830 – 0930	Root Cause Analysis (RCA) <i>Fishbone Diagrams • Failure Mode Analysis</i>
0930 – 0945	Break
0945 – 1045	Maintenance Safety Protocols <i>Safety Guidelines • Personal Protective Equipment (PPE)</i>
1045 – 1145	Hazard Identification & Risk Assessment <i>Methods & Approaches • Mitigation Plans</i>
1145 – 1200	Break
1200 – 1245	Incident Reporting & Management <i>Documentation • Follow-Up</i>
1245 – 1420	Emergency Response Planning <i>Fire Safety • Chemical Spills</i>
1420 – 1430	Recap
1430	Lunch & End of Day Three

Day 4: Wednesday, 03rd of December 2025

0730 – 0930	Maintenance Management Software <i>Features • Software Selection Criteria</i>
0930 – 0945	Break
0945 – 1045	Computerized Maintenance Management System (CMMS) <i>Implementation • Data Input & Management</i>
1045 – 1145	Internet of Things (IoT) in Maintenance <i>Smart Sensors • Data Analysis</i>
1145 – 1200	Break
1200 – 1315	Digital Twin Technology <i>Benefits & Limitations • Real-world Case Studies</i>
1315 – 1345	Data Analytics & Decision Making <i>Data Collection Methods • Data Interpretation</i>
1345 – 1420	Cybersecurity Concerns <i>Risk Factors • Best Practices</i>
1420 – 1430	Recap
1430	Lunch & End of Day Four

Day 5: Thursday, 04th of December 2025

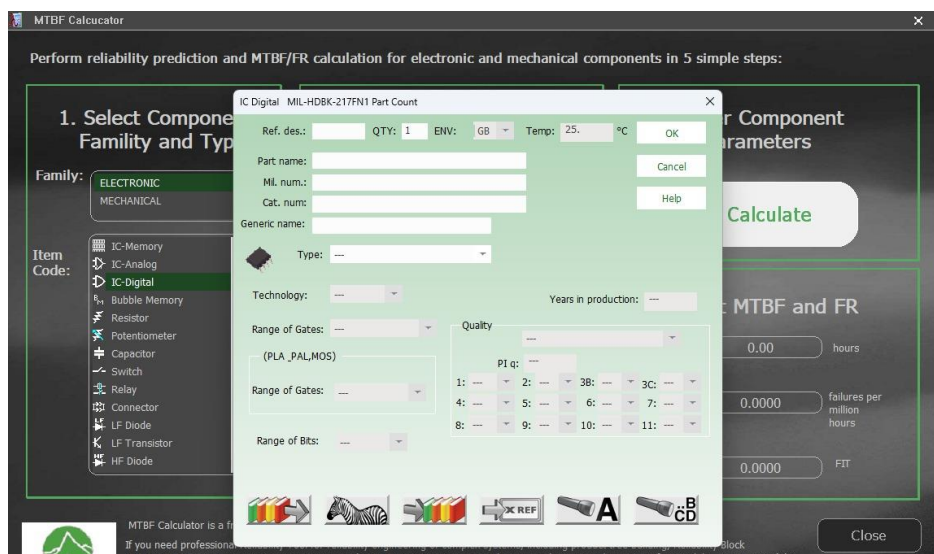
0730 – 0830	Leadership Skills for Maintenance Managers <i>Emotional Intelligence • Conflict Resolution</i>
0830 – 0930	Communication Skills <i>Technical Writing • Verbal Communication</i>
0930 – 0945	Break
0945 – 1115	Team Building & Motivation <i>Team Dynamics • Incentive Systems</i>
1115 – 1215	Training & Development <i>Employee Training Programs • Succession Planning</i>
1215 – 1230	Break
1230 – 1300	Future Trends in Maintenance Management <i>Sustainable Practices • Machine Learning & AI</i>
1300 – 1315	Course Conclusion
1315 – 1415	COMPETENCY EXAM
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Simulator (Hands-on Practical Sessions)

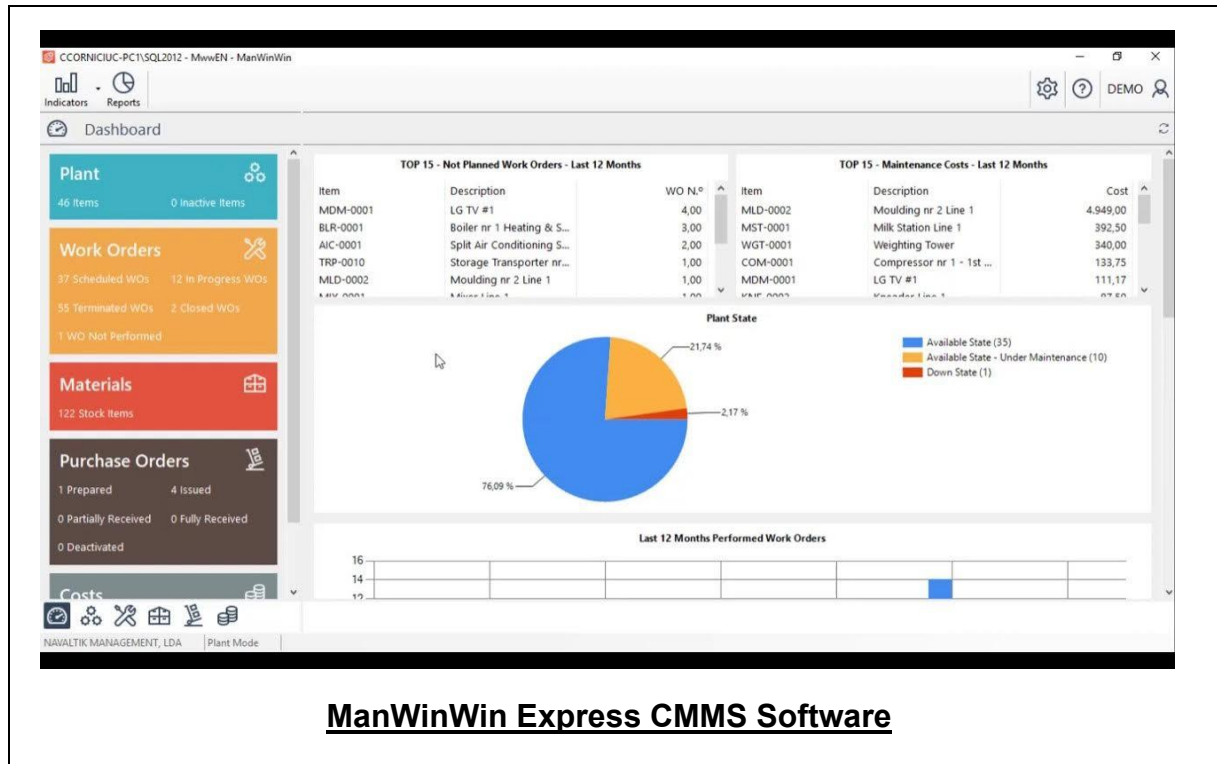
Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the state-of-the-art simulator “iLearnVibration”, “MTBF Calculator” and “ManWinWin Express CMMS Software”.



iLearnVibration



MTBF Calculator



ManWinWin Express CMMS Software

Course Coordinator

Reem Dergham, Tel: +974 4423 1327, Email: reem@haward.org