

COURSE OVERVIEW RE0225
Certified Maintenance Planner (CMP)
Professional Maintenance Planner
(Accredited by ILM)

Course Title

Certified Maintenance Planner (CMP):
 Professional Maintenance Planner (Accredited by ILM)

Course Date/Venue

September 15-19, 2024/Sharjah Meeting Room,
 The Tower Plaza Hotel, Dubai, UAE

Course Reference

RE0225

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 Certified Maintenance Planner (CMP): Professional Maintenance Planner (Accredited by ILM). It covers the maintenance planning and integrated maintenance production management partnership; the planning, coordination and scheduling to management and operations; the good maintenance practices and the responsible supervisor or team leader; the six planning and scheduling principle; and the wrench time, actual hours to plan estimate, planning variance index and enhancing planner productivity.

During this interactive course, participants will learn the backlog management, existing staffing processes and preventive/predictive maintenance inspections; the steady state backlog relief, deferred maintenance, capital program requirements and other considerations for staffing; the planning process (micro-planning) and detailed planning process-materials, tools and equipment; the work measurement, analytical estimating, scheduling maintenance work and job execution; and the job close-out and follow-up, managing planning, direct and indirect measure of planning effectiveness and project planning and management.

Course Objectives

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

- Get certified as a “*Certified Maintenance Planner*”
- Discuss maintenance planning and integrated maintenance production management partnership
- Explain planning, coordination and scheduling to management and operations as well as identify work sampling, typical maintenance worker’s day and symptoms of ineffective job planning
- Carryout good maintenance practices and identify the responsible supervisor or team leader
- Discuss the six planning principles and scheduling principles
- Recognize wrench time and the actual hours to plan estimate
- Explain planning variance index and enhance planner productivity
- Discuss backlog management covering ready backlog and planned backlog as well as review checklist for backlog integrity and develop work programs and backlog weeks trend chart
- Apply existing staffing processes and preventive/predictive maintenance inspections
- Explain steady state backlog relief, deferred maintenance, capital program requirements and other considerations for staffing
- Illustrate planning process (micro-planning) including planning process-screening, scoping, research and detailed planning
- Discuss detailed planning process-materials, tools and equipment
- Employ work measurement, analytical estimating, scheduling maintenance work and job execution
- Carryout job close-out and follow-up, managing planning, direct and indirect measure of planning effectiveness and project planning and 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, 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 covers systematic techniques in maintenance planning, scheduling and work control to assist maintenance team responsible for delivering maximum reliability and availability of equipment at the lowest possible cost. It is intended for plant maintenance engineers, planning engineers, maintenance planners and maintenance coordinators.

To maximize the benefits of the course, delegates should be prepared to actively participate in the course and bring examples of standard work plans, a list of plant performance metrics, the work priority system in-place, and any other planning or scheduling material they would like to review and discuss.


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. Successful candidate will be certified as a “*Certified Maintenance Planner*”. 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: -

Certified Maintenance Planner


Certification Number: 74851
 Certification Date: 15-Nov-2023
 Expiration Date: 15-Nov-2028

This is to certify that **Waleed Al Habeeb** has successfully met the requirements to be certified as a **Maintenance Planner** under the Certified Maintenance Planner (CMP) (Accredited by ILM) Program, RE0225.



J. Castillo
 Mr. Jaryl Castillo
 Academic Director

Haward Technology is accredited by:




Maintenance Planner

Certification Program

This program is designed to assist companies in identifying professionals who have satisfied the minimum competencies specified in RE0225.

Haward Technology does not warrant or guarantee the performance of any professional certified under this program.

Haward Technology is accredited by:



74851

- (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 Middle East
Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 16-Nov-23
HTME No.: 74851
Participant Name: Waleed Al Habeeb

| Program Ref. | Program Title | Program Date | No. of Contact Hours | CEU's |
|--------------|---|----------------------|----------------------|-------|
| RE0225 | Certified Maintenance Planner (CMP) <i>(Accredited by ILM)</i> | November 11-15, 2023 | 30 | 3.0 |

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

TRUE COPY
Jayl Castillo
Academic Director

Haward Technology has been approved as an Accredited Provider by the International Association for Continuing Education and Training (IACET), 2023 Corporate Way, Suite 600 Herndon, VA 20171, USA. In obtaining this approval, Haward Technology has demonstrated that it complies with the ANSI/IACET 1:2018 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 1:2018 Standard.

Haward Technology's courses meet the professional certification and continuing education requirements for participants seeking Continuing Education Units (CEUs). The CEU is an internationally recognized unit of measurement in quality courses of continuing education. 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 quality courses of continuing education.

Haward Technology is accredited by


PO. Box. 26070, Abu Dhabi, United Arab Emirates | Tel.: +971 2 3091 724 | Email: info@haward.org | Website: www.haward.org

- (3) ILM (City & Guilds Group) Certificates will be issued to participants who have successfully completed the course and passed the exam at the end of the course.

ilm

Professional Maintenance Planner (CMP)

is awarded to
Waleed Al Habeeb

through
Haward Technology Middle East

Awarded 14 November 2021

1301216460-17825948116713AM/1707/85
1411217RE020576302148TL2107/M/2002/1985
550284805710


Kristie Donnelly
Kristie Donnelly MBE
Chief Executive Officer
The City and Guilds of London Institute

D. Pugh
David Phillip
Managing Director
ILM

The City and Guilds of London Institute is the awarding body/awarding organisation for ILM qualifications. The Institute was founded in 1878 and granted Royal Charter in 1900. ILM is a City & Guilds Group business.


Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- 

ILM (City & Guilds Group)

Haward Technology has been awarded the **ILM Recognised** status under the **City & Guilds Group Business**. The ILM stands for excellence in leadership and management qualifications design, development and delivery under the City & Guilds of London Institute as the award-giving body for these qualifications. ILM recognises and approved the programmes of training providers and academic institutions that deliver quality-assured training and accredited qualifications. As an Approved Provider of ILM Recognised programmes, Haward Technology meets the quality assurance criteria of the ILM to deliver application-based leadership and management programs that meet international standards and professional benchmarks.


- 

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.

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 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, Fundamentals of Distillation** for Engineers, **Distillation Operation and Troubleshooting, Advanced Distillation Troubleshooting, Distillation Technology, Vacuum Distillation, Ammonia Storage & Loading Systems, Ammonia Plant Operation, Troubleshooting & Optimization, Ammonia Recovery, Ammonia Plant Safety, Hazard of Ammonia Handling, Storage & Shipping, Operational Excellence in Ammonia Plants, Fertilizer Storage Management (Ammonia & Urea), Fertilizer Manufacturing Process Technology, Sulphur Recovery, Phenol Recovery & Extraction, Wax Sweating & Blending, Petrochemical & Fertilizer Plants, Nitrogen Fertilizer Production, Petroleum Industry Process Engineering, Refining Process & Petroleum Products, Refinery Planning & Economics, Safe Refinery Operations, Hydrotreating & Hydro-processing, Separators in Oil & Gas Industry, Gas Testing & Energy Isolations, Gas Liquor Separation, Industrial Liquid Mixing, Wax Bleachers, Extractors, Fractionation, Operation & Control of Distillation, Process of Crude ATM & Vacuum Distillation Unit, Water Purification, Water Transport & Distribution, Steam & Electricity, Flame Arrestors, Coal Processing, Environmental Emission Control, R&D of Wax Blending, Wax Molding/Slabbing, Industrial Drying, Principles, Selection & Design, Certified Process Plant Operations, Control & Troubleshooting, Operator Responsibilities, Storage Tanks Operations & Measurements, Tank Design, Construction, Inspection & Maintenance, Atmospheric Tanks, Process Plant Troubleshooting & Engineering Problem Solving, Process Plant Performance, Efficiency & Optimization, Continuous Improvement & Benchmarking, Process Troubleshooting Techniques, Oil & Gas Operation/Introduction to Surface Facilities, Pressure Vessel Operation, Process Equipment Performance & Troubleshooting, Plant Startup & Shutdown, Startup & Shutdown the Plant While Handling Abnormal Conditions, Flare & Relief System, Process Gas Plant Start-up, Commissioning & Problem Solving, Process Liquid and Process Handling & Measuring Equipment. Further, he is also well-versed in **Compressors & Turbines Operation, Maintenance & Troubleshooting, Heat Exchanger Overhaul & Testing Techniques, Balancing of Rotating Machinery (BRM), Pipe Stress Analysis, Valves & Actuators Technology, Inspect & Maintain Safeguarding Vent & Relief System, Certified Inspectors for Vehicle & Equipment, Optimizing Equipment Maintenance & Replacement Decisions, Certified Maintenance Planner (CMP), Certified Planning and Scheduling Professional (AACE-PSP), Material Cataloguing, Specifications, Handling & Storage, Steam Trap Design, Operation, Maintenance & Troubleshooting, Steam Trapping & Control, Column, Pump Technology, Pump Selection & Installation, Centrifugal Pumps Troubleshooting, Pumps Design, Selection & Operation, Pump & Exchangers, Troubleshooting & Design, Rotating Equipment Operation & Troubleshooting, Control & ESD System, Detailed Engineering Drawings, Codes & Standards, Budget Preparation, Allocation & Cost Control, Root Cause Analysis (RCA), Production Optimization, Permit to Work (PTW), Project Engineering, Data Analysis, Process Hazard Analysis (PHA), HAZOP Study, Sampling & Analysis, Training Analysis, Job Analysis Techniques, Storage & Handling of Toxic Chemicals & Hazardous Materials, Hazardous Material Classification & Storage/Disposal, Dangerous Goods, Environmental Management System (EMS), Supply Chain, Purchasing, Procurement, Logistics Management & Transport & Warehousing & Inventory, Risk Monitoring Authorized Gas Tester (AGT), Confined Space Entry (CSE), Personal Protective Equipment (PPE), Fire & Gas, First Aid and Occupational Health & Safety.****

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 Fee

US\$ 5,500 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 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, 15th of September 2024

| | |
|-------------|---|
| 0730 – 0800 | <i>Registration & Coffee</i> |
| 0800 – 0815 | <i>Welcome & Introduction</i> |
| 0815 – 0830 | PRE-TEST |
| 0830 – 0930 | Introduction to Maintenance Planning <i>Integrated Maintenance & Production Management Partnership • Definitions • Why Plan, Coordinate & Schedule Maintenance Jobs? • Objectives of Work Preparation • Prerequisites • Understanding the Nature of Maintenance Activities & Organizing Accordingly • Organization by Work Type</i> |
| 0930 – 0945 | <i>Break</i> |
| 0945 – 1045 | Selling Planning, Coordination & Scheduling to Management & Operations <i>Selling Management • Work Sampling • Typical Maintenance Worker's Day – With & Without Planning & Scheduling • Symptoms of Ineffective Job Planning • Convey the Many Benefits that Accrue to Each Stakeholder</i> |
| 1045 – 1145 | Where Planning Fits into Good Maintenance Practices <i>Should Work Preparation be a Separate and Distinct Function? • The Assigned Craftsman • The Responsible Supervisor or Team Leader • The Proven Answer • Channels of Coordination and Communication • Working Liaisons • Maintenance Liaisons • Should Planning be Separate from Scheduling? • Clarification of Roles • Relationship with other Functions</i> |
| 1145 – 1200 | <i>Break</i> |



| | |
|-------------|---|
| 1200 – 1300 | Planning Principles Six Principles • The Planning Vision; The Mission • Planning Principle 1: Separate Department • Principle 2: Focus on Future Work • Principle 3: Component Level Files • Principle 4: Estimates Based on Planner Expertise • Principle 5: Recognize the Skill of the Crafts • Principle 6: Measure Performance with Schedule Compliance |
| 1300 – 1420 | Scheduling Principles Why Maintenance does not Assign Enough Work • Advance Scheduling in an Allocation • Principle 1: Plan for Lowest Required Skill Level (Prerequisites of Scheduling) • Principle 2: Schedules & Job Priorities are Important (Prerequisites of Scheduling) • Principle 3: Schedule from Forecast of Highest Skills Available (Advance Scheduling Process) • Principle 4: Schedule for Every Work Hour Available • Principle 4 Brings the Previous Scheduling Principles Together • Principle 5: Crew Leader Handles Current Day's Work • Principle 6: Measure Performance with Schedule Compliance |
| 1420 - 1430 | Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow |
| 1430 | Lunch & End of Day One |

Day 2: Monday, 16th of September 2024

| | |
|-------------|---|
| 0730 – 0930 | Wrench Time Definition • Objectives • Formula • Qualifications • Ample Calculation • Observations • Management of Planners |
| 0930 – 0945 | Break |
| 0945 – 1150 | Actual Hours to Planning Estimate Definition • Objectives • Formula • Component Definitions • Actual Work Order Hours • Planned Work Order Hours • Qualifications • Sample Calculation • Best in Class Target Value |
| 1150 – 1215 | Planning Variance Index Definition • Objectives • Formula • Component Definitions • Sample Calculation |
| 1215 – 1230 | Break |
| 1230 – 1330 | Planner Productivity Definition • Objectives • Formula • Sample Calculation • Sample #2 Using Job Plans |
| 1330 - 1420 | Backlog Management: Ready Backlog Definition • Objectives • Formula • Component Definition • Sample Calculation • Best in Class Target Value: 2 to 4 Weeks |
| 1420 - 1430 | Recap Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow |
| 1430 | Lunch & End of Day Two |



Day 3: Tuesday, 17th of September 2024

| | |
|-------------|--|
| 0730 – 0930 | Backlog Management: Planned Backlog <i>Definition • Objectives • Formula • Component Definitions • Ready Work • Sample Calculation • Job Status • Checklist for Backlog Integrity • Development of Work Programs • A Weekly Example of a Work Program • Backlog Weeks Trend Chart</i> |
| 0930 – 0945 | Break |
| 0945 – 1045 | Sizing the Maintenance Staff <i>Existing Staffing Processes • Preventive/Predictive Maintenance Inspections • Steady State Backlog Relief • Deferred Maintenance • Capital Program Requirements • Summary of Requirements • Other Considerations for Staffing • Another Approach to the Staffing Question</i> |
| 1045 – 1145 | The Planning Process (Micro-Planning) <i>Steps of the Planning Process • The Planned Job Package</i> |
| 1145 – 1200 | Break |
| 1200 – 1420 | The Planning Process-Screening, Scoping, Research & Detailed Planning <i>Screening of Work Requests • Job Assessment & Scoping Check-list • Dealing with Scope Creep • Job Research • Job Preparation • Feedback on the Plan • Job Planning Survey • Coordination of Equipment Access, Permitting, Safety & Statutory Permission</i> |
| 1420 - 1430 | Recap <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow</i> |
| 1430 | Lunch & End of Day Three |

Day 4: Wednesday, 18th of September 2024

| | |
|-------------|---|
| 0730 – 0930 | Detailed Planning Process-Materials, Tools & Equipment <i>Planner/Scheduler Responsibilities to the Material Management Process • Material Related Steps in the Planning of Specific Jobs are Summarized • The Planner's Role in Rebuilding • Controlling the Maintenance Storeroom with Statistical Inventory Control • JIT Versus SIC</i> |
| 0930 – 0945 | Break |
| 0945 – 1045 | Work Measurement <i>Adjusted Averages • Analytical Estimates • Job Slotting & Labor Libraries • Universal Maintenance Standards • Building an Estimate • Job Creep</i> |
| 1045– 1145 | Analytical Estimating <i>Common Job Sequence • Travel-Time Table • Miscellaneous Provision Table • The Labour Library • Development of Slotting Tables • Slotting Table Cataloguing • Job Estimating Worksheet • Coordination with Operations</i> |
| 1145 – 1200 | Break |
| 1200 – 1420 | Scheduling Maintenance Work <i>The Weekly Expectation • Scheduling Techniques • Instruction for Preparing Schedules • Completing the Scheduling Process</i> |
| 1420 - 1430 | Recap <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Topics that were Discussed Today and Advise Them of the Topics to be Discussed Tomorrow</i> |
| 1430 | Lunch & End of Day Four |

Day 5: Thursday, 19th of September 2024

| | |
|-------------|--|
| 0730 – 0930 | Job Execution <i>Three Important Functions • Daily Schedule Adjustment • Planner Support of Job Execution • The Morning Meeting</i> |
| 0930 – 0945 | <i>Break</i> |
| 0945 – 1045 | Job Close Out & Follow Up <i>Schedule Compliance • Reasons for Non-Compliance • Reason for Schedule Non-Compliance • Calculation of Schedule Compliance • Sample Calculation • Supplementary Metrics</i> |
| 1045 - 1215 | Planner & Scheduler Metrics <i>Managing Planning • Direct Measure of Planning Effectiveness • Indirect Measures of Planning Effectiveness • The Follow-Up Critique • Activity Sampling • Using CMMS to Aid Planning and Scheduling</i> |
| 1215 – 1230 | <i>Break</i> |
| 1230 – 1300 | Planning & Management of Projects <i>Project Management Process • Phase One – Project Definition • Phase Two – Preliminary Engineering • Phase Three – Justification and Funding • Phase Four – Detailed project Planning • Phase Five – Project Execution • Phase Six – Project Completion and Close-Out • Phase Seven – Project Review (6 Months After Completion)</i> |
| 1300 – 1315 | Course Conclusion <i>Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course</i> |
| 1315 – 1415 | COMPETENCY EXAM |
| 1415 – 1430 | <i>Presentation of Course Certificates</i> |
| 1430 | <i>Lunch & End of Course</i> |

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 “MS Project” and “Mindview Software”.





Course Coordinator

Mari Nakintu, Tel: +971 230 91 714, Email: mari1@haward.org