COURSE OVERVIEW TM0422
Introduction to Management of Change – Plant & Process

Course Title
Introduction to Management of Change – Plant & Process

Course Date/Venue
August 10-14, 2026/Online Virtual Training

Course Reference
TM0422

Course Duration/Credits
Five days/2.75 CEUs/27.5 PDHs

Course Description

This practical and highly-interactive course includes various practical sessions and exercises. Theory learnt will be applied using our software tools.

This course is designed to provide participants with a detailed and up-to-date overview of Management of Change - Plant and Process. It covers the importance of MoC in process industries, types of changes in plants and processes and relationship between MoC and process safety; the process safety and risk management principles, regulatory and international standards including the categories and scope of change; the roles and responsibilities in MoC and MoC workflow and lifecycle; the hazard identification techniques, process hazard analysis (PHA) and risk assessment in MoC; and the impact assessment of plant changes, safety instrumented systems and controls as well as documentation and technical review.

During this interactive course, participants will learn the planning and execution of changes; the operational readiness and pre-startup safety review (PSSR); communicating changes effectively and managing human factors during change, temporary changes and bypasses and emergency and urgent changes; the performance monitoring of MoC systems, auditing and compliance verification and incident investigation related to change; and the mechanical integrity and reliability, contractor and vendor management including best practices in MoC implementation.

Course Objectives/Outcomes & Benefits for the Participants

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

- Apply and gain a good working knowledge on management of change - plant and process
- Discuss the importance of MoC in process industries, types of changes in plants and processes and relationship between MoC and process safety
- Explain process safety and risk management principles, regulatory and international standards including the categories and scope of change
- Identify the roles and responsibilities in MoC and describe MoC workflow and lifecycle
- Carryout hazard identification techniques, process hazard analysis (PHA) and risk assessment in MoC
- Discuss the impact assessment of plant changes, safety instrumented systems and controls as well as documentation and technical review
- Plan and execute changes, apply operational readiness and pre-startup safety review (PSSR) and communicate changes effectively
- Manage human factors during change, temporary changes and bypasses and emergency and urgent changes
- Apply performance monitoring of MoC systems, auditing and compliance verification and incident investigation related to change
- Carryout mechanical integrity and reliability, contractor and vendor management including best practices in MoC implementation
- Integrate MoC with PSM programs, link with permit-to-work systems, coordinate with emergency response plans and align with ISO management systems
- Manage workforce transitions and apply proper communication during organizational change

Who Should Attend

This course provides an overview of all significant aspects and considerations of management of change in plant and process for senior executives and leaders, plant managers and supervisors, operations team, engineering and maintenance teams, human resources, change management team/facilitators and external consultants/experts.

Course Fee

US$ 2,750 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

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

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 **2.75 CEUs** (Continuing Education Units) or **27.5 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.

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, M.Com, B.Com (Hons), PMP, Industrial Psychologist (HPCSA Reg.), PMI-ATP Instructor PMI-PMP, PMI-CAPM Instructor is a **Senior Management Consultant & Project Management Professional** with over **30 years** of combined engineering, managerial, consulting, counseling, and international training experience across Africa, the Middle East, the Gulf region, and Europe. His expertise lies extensively in the areas of **Project & Contracts** Management Skills, **Project & Construction** Management, **Project** Planning, Scheduling, Cost Control, and Earned Value Management, **Project** Management (**Predictive**, **Agile**, and **Hybrid**), **PMO** setup and governance, Project Delivery & Governance Framework, **Project** Management Practices, **Project** Management Disciplines, **Risk** and **Contract** Management (including contract development, tendering, dispute resolution, and claims), **Risk** Identification Tools & Techniques, **Project** Life Cycle, **Stakeholder Management** and **Communication**, **Performance Coaching** and **Difficult Conversations**, **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, **Leadership Orientation** Programme, **Leadership & Team** Development, Psychology of **Leadership**, **Interpersonal Skills & Teamwork**, **Coaching & Mentoring**, **Innovation & Creativity**, **Leadership & Performance** Management, **Leadership Communication**, **Leadership Excellence** for Senior Management, **Supervisory**, **Leadership**, **Coaching & Mentoring**, **Leadership**, **Communications** & Interpersonal Skills, Administrative Leadership Skills, **Office Management & Administration** Skills, **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**, **Coaching & Motivation**, **Creative Thinking & Problem-Solving** Techniques, Effective **Business Writing Skills**, **Writing** Business Documents, **Business Writing** (Memo & Report Writing), Project **Risk** Analysis & Risk Management, Global Diverse & Virtual Teams Operation, **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 has also led or supported Training Needs Analyses **(TNA)**, large-scale capability development programs, and leadership pipelines for technical, operational, and graduate employees. 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.

During his career life, Dr. Le Roux has gained his academic and field experience through his various significant positions and dedication as the **Training & Development General Manager**, **Departmental Head (Electrical)**, **Project Manager**, **Account Manager**, **Commercial Sales Manager**, **Manager**, **Sales Engineer**, **Project Specialist**, **Psychology Practitioner**, **Senior Consultant/Trainer**, **Business Consultant**, **Assistant Chief Education Specialist**, **ASI Coordinator**, **Part-time Lecturer/Trainer**, **PMP & Scrum Trainer**, **Assessor & Moderator**, **Team Leader**, **Departmental Head**, **Senior HR Consultant**, **Senior Lecturer / Academic Supervisor**, **Technical Instructor/Qualifying Technician**, **Apprentice Electrician: Signals**, **International Trainer**, 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 and CBM Training.

Dr. Le Roux has a **PhD** 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 **Qualified Electrical & Mechanical Engineering** from **Germiston College**, **South Africa**. Further, he is a **Certified Project Management Professional** (**PMP**)**,** a **PMI Authorized Training Partner** (**ATP**) **Instructor**, a **Certified Associate** in **Project Management** (**PMI-CAPM**), 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.

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.

Learning Design & Customization

This course can be customized to the exact requirements of clients. Haward Technology is so proud of our huge capabilities in tailoring our courses to the training needs of our valued clients.

Virtual Training (If Applicable)

If this course is delivered online as a Virtual Training, the following limitations will be applicable:-

Certificates	Only soft copy certificates will be issued to participants through Haward's Portal. This includes Wallet Card Certificates if applicable
Training Materials	Only soft copy Training Materials (PDF format) will be issued to participant through the Virtual Training Platform
Training Methodology	80% of the program will be theory and 20% will be practical sessions, exercises, case studies, simulators or videos
Training Program	The training will be for 6 hours per day starting at 0800 and ending at 1400
H-STK Smart Training Kit	Not Applicable
Hands-on Practical Workshops	Not Applicable
Site Visit	Not Applicable
Simulators	Only software simulators will be used in the virtual courses. Hardware simulators are not applicable and will not be used in Virtual Training

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: ***Monday, 10th of August 2026***

0800 – 0830	*Registration & Coffee*
0830 – 0845	*Welcome & Introduction*
0845 – 0900	***PRE-TEST***
0830 – 0930	***Introduction to Management of Change*** *Definition and Purpose of MOC • Importance of MOC in Process Industries • Types of Changes in Plants and Processes • Relationship Between MOC and Process Safety*
0930 - 0945	*Break*
0945 – 1030	***Process Safety & Risk Management Principles*** *Fundamentals of Process Safety Management (PSM) • Major Accident Hazards in Industrial Facilities • Layers of Protection and Defense Systems • Risk-Based Thinking in Operations*
1030 – 1100	***Regulatory & International Standards*** *OSHA PSM Requirements for MOC • API, CCPS, and ISO Guidelines • Environmental and Safety Compliance Obligations • Legal Liabilities Associated with Uncontrolled Changes*
1100 – 1215	***Categories & Scope of Change*** *Temporary versus Permanent Changes • Technical, Organizational, and Procedural Changes • Emergency Changes and Fast-Track Modifications • Replacement-in-Kind Criteria and Exceptions*
1215 - 1230	*Break*
1230 – 1300	***Roles & Responsibilities in MOC*** *Responsibilities of Plant Management • Engineering and Maintenance Roles • Contractor and Vendor Involvement • Employee Participation and Accountability*
1300 - 1350	***MOC Workflow & Lifecycle*** *Initiating a Change Request • Approval and Authorization Process • Documentation and Record Management • Closure and Post-Implementation Review*
1350 – 1400	***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*
1400	*End of Day One*

Day 2: ***Tuesday, 11th of August 2026***

0800 – 0900	***Hazard Identification Techniques*** *Introduction to Hazard Identification • HAZID Methodology and Applications • Checklists and What-If Analysis • Failure Scenarios and Consequence Identification*
0900 – 0930	***Process Hazard Analysis (PHA)*** *Purpose and Structure of PHA • HAZOP Methodology and Guidewords • FMEA and Fault Tree Analysis • Selecting Appropriate PHA Methods*

0930 – 0945	Break
0945 – 1130	***Risk Assessment in MOC*** *Qualitative and Quantitative Risk Assessment • Risk Matrix Development and Interpretation • Likelihood versus Consequence Evaluation • Risk Ranking and Prioritization*
1130 – 1230	***Impact Assessment of Plant Changes*** *Effects on Equipment Integrity • Operational and Production Impacts • Human Factors and Ergonomic Considerations • Environmental Impact Evaluation*
1230 – 1245	Break
1245 – 1330	***Safety Instrumented Systems & Controls*** *Basics of Safety Instrumented Systems (SIS) • Instrumentation Changes and Implications • Alarm Management Considerations • Functional Safety Verification*
1330 - 1350	***Documentation & Technical Review*** *Updating P&IDs and Engineering Drawings • Revision Control Procedures • Technical Document Verification • Maintaining Audit-Ready Records*
1350 – 1400	***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*
1400	End of Day Two

Day 3: ***Wednesday, 12th of August 2026***

0800 – 0900	***Planning & Executing Changes*** *Change Planning Methodologies • Resource Allocation and Scheduling • Coordination Between Departments • Managing Shutdown and Startup Activities*
0900 – 0930	***Operational Readiness & Pre-Startup Safety Review (PSSR)*** *Objectives of PSSR • Verifying Installation and Construction • Safety System Functionality Checks • Operator Readiness Verification*
0930 – 0945	Break
0945 – 1130	***Communication & Training*** *Communicating Changes Effectively • Workforce Competency Requirements • Training Strategies for Modified Systems • Contractor Orientation and Awareness*
1130 – 1230	***Managing Human Factors During Change*** *Human Error and Behavioral Safety • Fatigue and Workload Considerations • Shift Handover Communication • Organizational Culture and Change Acceptance*

1230 – 1245	Break
1245 – 1330	***Temporary Changes & Bypasses*** Managing Temporary Operating Procedures • Control System Bypass Management • Time Limitations and Tracking • Revalidation and Removal Procedures
1330 - 1350	***Emergency & Urgent Changes*** Criteria for Emergency Changes • Accelerated Approval Procedures • Risk Mitigation During Urgent Modifications • Documentation After Emergency Implementation
1350 – 1400	***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
1400	End of Day Three

Day 4: Thursday, 13th of August 2026

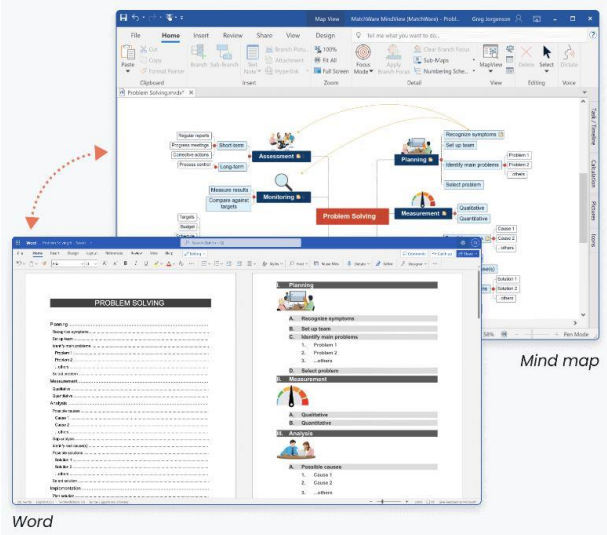
0800 – 0900	***Performance Monitoring of MOC Systems*** Key Performance Indicators (KPIs) • Monitoring Effectiveness of Changes • Leading and Lagging Indicators • Continuous Improvement Practices
0900 – 0930	***Auditing & Compliance Verification*** Internal MOC Audit Requirements • Audit Planning and Execution • Non-Conformance Identification • Corrective and Preventive Actions
0930 – 0945	Break
0945 – 1130	***Incident Investigation Related to Change*** Common Incidents Caused by Poor MOC • Root Cause Analysis Techniques • Lessons Learned from Industry Accidents • Corrective Action Tracking
1130 – 1230	***Mechanical Integrity & Reliability*** Equipment Integrity During Modifications • Inspection and Testing Requirements • Reliability-Centered Maintenance Concepts • Managing Aging Equipment After Change
1230 – 1245	Break
1245 – 1330	***Contractor & Vendor Management*** Contractor Qualification and Evaluation • Communication of Plant Hazards • Vendor Documentation Requirements • Monitoring Contractor Compliance
1330 - 1350	***Digitalization & MOC Software Systems*** Electronic MOC Workflows • Digital Approval Systems • Data Management and Traceability • Cybersecurity Considerations in Process Changes
1350 – 1400	***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
1400	End of Day Four

Day 5: **Friday, 14th of August 2026**

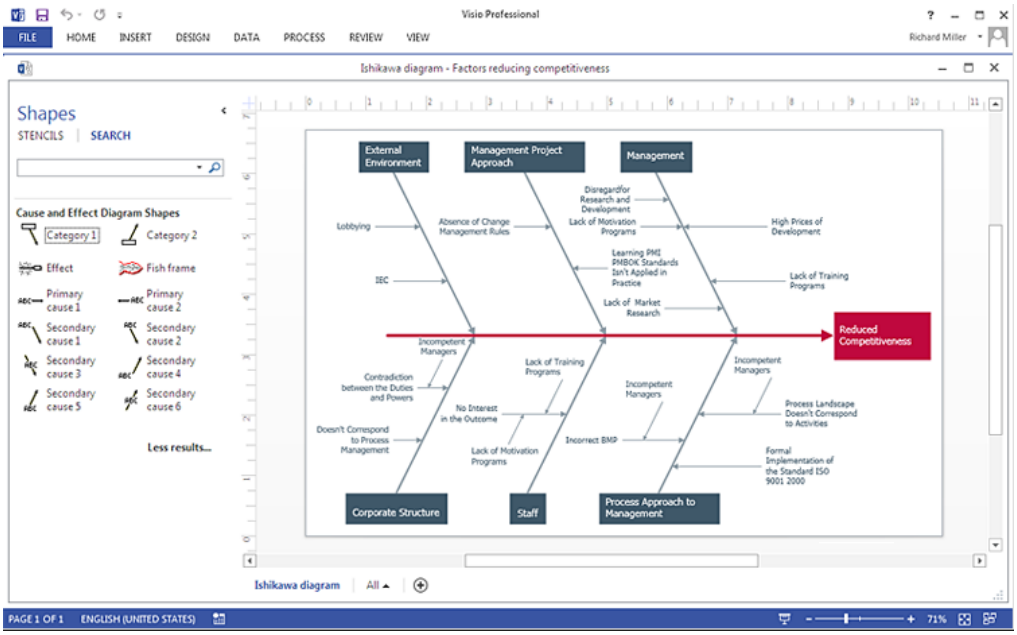
0800 – 0900	***Case Studies of Major Industrial Incidents*** *Bhopal Disaster Lessons Learned • Texas City Refinery Explosion Analysis • Piper Alpha Offshore Platform Case • MOC Failures and Prevention Strategies*
0900 – 0930	***Best Practices in MOC Implementation*** *Building an Effective MOC Culture • Leadership Commitment and Engagement • Integration with Operational Excellence • Benchmarking Against Industry Leaders*
0930 – 0945	*Break*
0945 – 1100	***Integrating MOC with Other Management Systems*** *Integration with PSM Programs • Linkage with Permit-to-Work Systems • Coordination with Emergency Response Plans • Alignment with ISO Management Systems*
1100 – 1215	***Organizational Change Management*** *Managing Workforce Transitions • Communication During Organizational Change • Competency Management Programs • Sustaining Long-Term Improvements*
1215 – 1230	*Break*
1230 – 1330	***Workshop & Practical Exercises*** *Conducting a Mock MOC Review • Performing a Risk Assessment Exercise • Developing Mitigation Action Plans • Group Discussion and Presentation Sessions*
1330 – 1345	***Course Conclusion*** *Using this Course Overview, the Instructor(s) will Brief Participants about the Course Topics that were Covered During the Course*
1345 – 1400	***POST-TEST***
1400	*End of Course*

Software Tools Demonstration

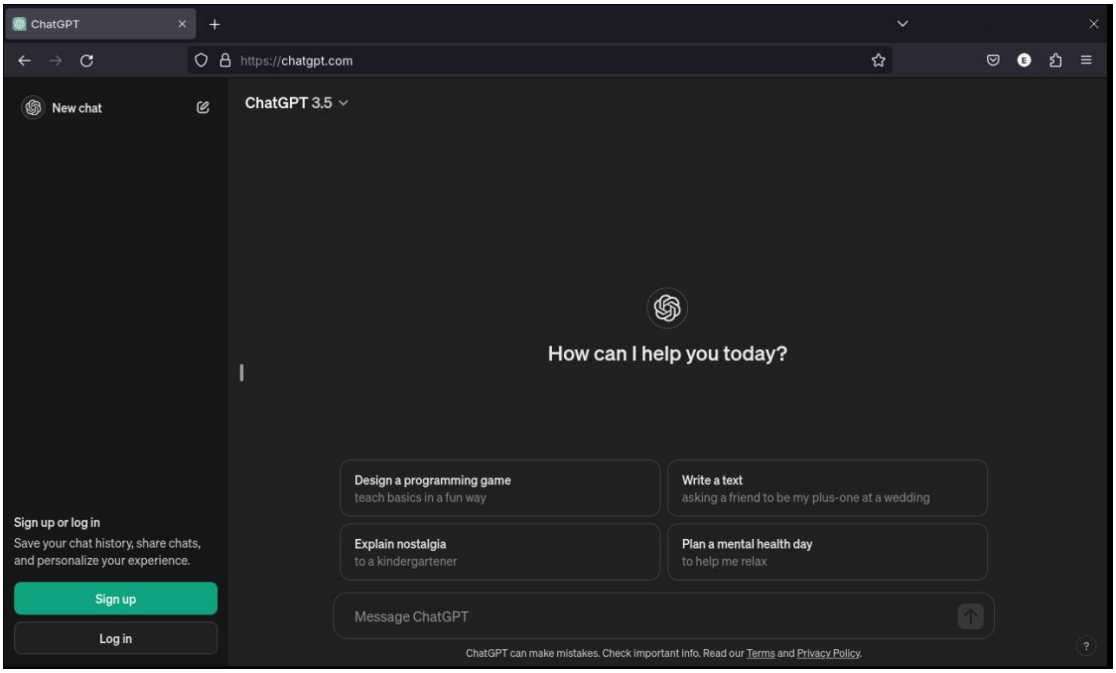
Practical sessions will be demonstrated through software tools during the course for delegates. Delegates will have an opportunity to understand the exercises using the "Mindview Software", "Visio Software", "ChatGPT" and "PMI Infinity".



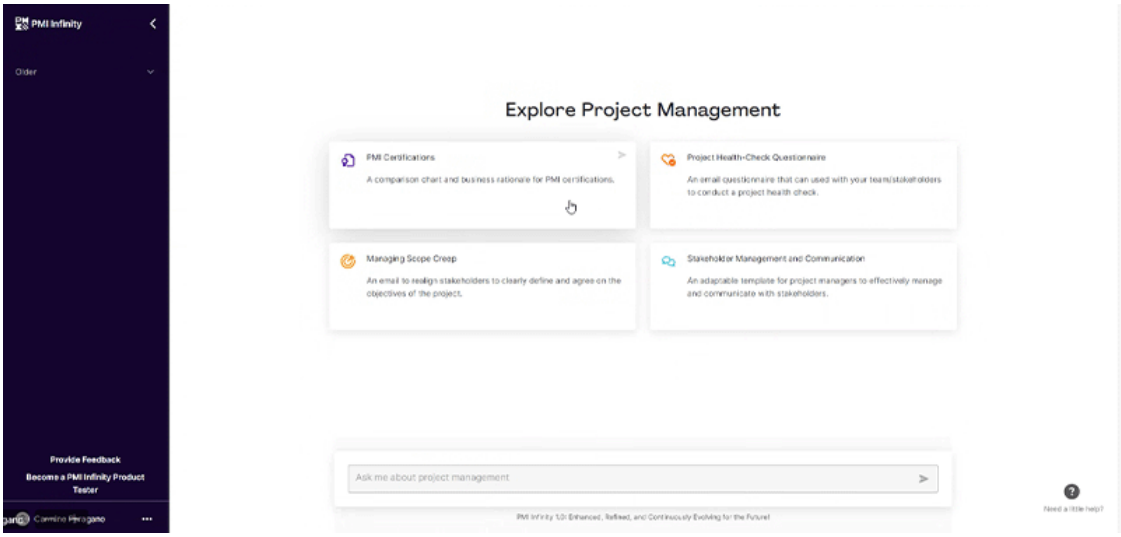
Mindview Software



Visio Software



ChatGPT Software



PMI Infinity

Course Coordinator

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