



COURSE OVERVIEW DM0443

API-780: Security Risk Assessment Methodology for the Petroleum & Petrochemical Industries

Course Title

API-780: Security Risk Assessment Methodology for the Petroleum & Petrochemical Industries

Course Date/Venue

November 08-12, 2026/TBA Meeting Room, Centro Corniche Al Khobar by Rotana, Al Khobar, KSA

Course Reference

DM0443



Course Duration/Credits

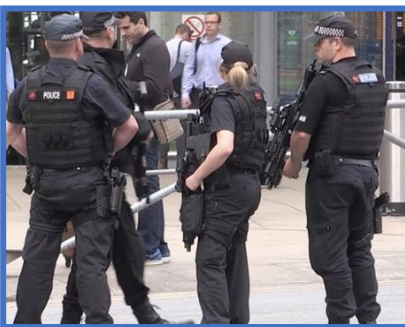
Five days/3.0 CEUs/30 PDHs

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 API-780: Security Risk Assessment Methodology for the Petroleum & Petrochemical Industries. It covers the fundamentals of security risk assessment, security risk management principles and security risk assessment concepts; the security threats, security consequences and API's five-step SRA methodology; the security risk assessment planning, building the SRA team and defining scope and objectives; the information collection and sources of information; and the site inspection and previous incident analysis.



During this interactive course, participants will learn the security risk assessment, threat intelligence, layers of security protection and vulnerability ranking; the risk analysis, risk ranking, countermeasure identification and evaluating countermeasures; the documentation and reporting including validation and follow-up; the characterization worksheet, threat assessment worksheet, vulnerability assessment worksheet and recommendation worksheet; the pipeline threats, remote asset protection, critical infrastructure considerations and risk reduction strategies; and the truck transportation, rail transportation, marine transportation and supply chain security.





Course Objectives/Outcomes & Benefits for the Participants

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

- Get certified as a “*Certified Security Risk Assessor (SRA)*”
- Discuss the fundamentals of security risk assessment, security risk management principles and security risk assessment concepts
- Identify security threats, security consequences and API's five-step SRA methodology
- Carryout security risk assessment planning, build the SRA team and define scope and objectives
- Review information collection and sources of information and perform site inspection and previous incident analysis
- Perform security risk assessment covering asset characterization, threat assessment and vulnerability assessment
- Recognize threat intelligence, layers of security protection and vulnerability ranking
- Apply risk analysis, risk ranking, countermeasure identification and evaluating countermeasures
- Carryout documentation and reporting including validation and follow-up
- Review characterization worksheet, threat assessment worksheet, vulnerability assessment worksheet and recommendation worksheet
- Assess pipeline threats and apply remote asset protection, critical infrastructure considerations and risk reduction strategies
- Monitor truck transportation, rail transportation, marine transportation and supply chain security

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 security risk assessment for risk management professionals, corporate security and asset protection professionals, security managers, supervisors and officers, security engineers and security systems specialists, emergency response and crisis management personnel and for those who are involved in physical and cyber security, facility and process design and operations, safety, logistics, emergency response, management and other disciplines as necessary.

Accommodation

Accommodation is not included in the course fees. However, any accommodation required can be arranged at the time of booking



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 Security Risk Assessor (SRA)". Certificates are valid for 5 years.

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-25
HTME No. 74851
Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
DM0443	API-780: Security Risk Assessment Methodology for the Petroleum & Petrochemical Industries	Nov 10-14, 2025	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 Accredited 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 1-2018 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) 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

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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\$ 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.



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. John Burnip, EHS, SAC, STS, NEBOSH-ENV, NEBOSH-IGC, NEBOSH-IFC, NEBOSH-PSM, NEBOSH-IOG, TechIOSH, is a **NEBOSH Approved Instructor** and a **Senior Security Consultant** with over **30 years** of practical **Offshore & Onshore** experience within **Oil, Gas, Refinery, Petrochemical** and **Nuclear** industries. His wide experience covers **NEBOSH** International General Certificate in Occupational Health & Safety, **NEBOSH** National Certificate in Construction Health & Safety, **NEBOSH** Certificate in Process Safety Management, **NEBOSH** Environmental Management Certificate, **NEBOSH** Certificate in Fire Safety, **NEBOSH** International Oil & Gas Certificate, Industrial **Security & Asset Protection**, **Security Threat** Identification, **Risk Analysis & Evaluation**, **Security Planning & Design**, **Security Policy Development**, **Integrated Security Systems**

Management, Safety & Loss Prevention, Security Engineering & Emergency Management Planning, Security Incident Management, Information Security & Confidentiality Management, Security Crisis Management, Strategic Security Management, Security Report Writing, Security Risk Management, Strategic Planning, Terrorism, Security Management, Security Risk Assessment, Physical Asset Protection, API 780 standards, HCIS New Security Directives & Process, Risk-Based Screening, Threat & Vulnerability Assessments, Residual Risks Calculation, Countermeasure Risk Scores Development, Advanced Intrusion Detection Systems, Perimeter & Building Barriers Design, Intellectual Property Protection, Interdependency & External Infrastructure Security, Quantitative Risk Assessments, Risk Registers Maintenance, Security Situation Reporting, Operating Access Control System, Security Operations Management, Security Investigations & Criminal Evidence, Security Risk Assessment, Supervising Security Operation Team, Industrial Security & Asset Protection, Security Threat Identification, Risk Analysis & Evaluation, PHA, HAZOP, HAZCOM, HAZMAT, HAZID, Hazard & Risk Assessment, Emergency Response Procedures Behavioural Based Safety (BBS), Confined Space Entry, Fall Protection, Emergency Response, H₂S, Safety Management System (ISO 45001), Accident/Incident Investigation System and Report PSM, Risk Assessment, SCE FMEA Failure Investigations, Site Management Safety Training (SMSTS), IADC/API Mobile Drilling Rig Inspections, Maintenance and Audits, Offshore Operations, Offshore Construction, Basic Offshore Safety Induction & Emergency Training (BOSIET), Onshore Fabrication & Offshore Pipelaying & Hook-Up, Crane Inspection, Crane Operations, Oilfield Startup & Operation, Steel Fabrication, OSHA, ISO 9001, ISO 14001, OHSAS 18001 and IMO (SOLAS) Regulations. Mr. Burnip has greatly contributed in upholding the highest possible levels of safety for numerous International Oil & Gas projects, Generation Systems & Platform Revamp, LPG & Gas Compression, Marine, Offshore and Power Plant Construction. Currently, he is the **HSE Advisor of Solvay wherein he is responsible in planning and implementation of the corporate safety program (OSHA codes).**

During Mr. Burnip's long career life, he had successfully carried out numerous projects in **Europe, North America, South America, Southeast Asia, Middle East** and the **North Sea**. He had worked for Delta Offshore Group, Solvay Asia Pacific, Likpin Dubai, SADRA/DOT, **ZADCO**, **McDermott** International (USA, Qatar, Egypt, India, Oman, Dubai and Abu Dhabi), **PDO**, **Shell**, **ARAMCO**, Salman Field, Leman Offshore Gas Field, GEC, Harland & Wolff PLC Belfast in North Ireland, Howard Doris – Kishorn in Scotland, **Westinghouse** Electric in Brazil and South Korea and **Chevron** Oil in Scotland as the **Commissioning Project Engineer, Project & Safety Engineer, Estimating Engineer, Security Engineer, Senior Instrument Engineer, Instrument Field Engineer, Lead Instrument Engineer, Instrument Engineer, Engineer, Emergency Response Training Manager, Security Manager, HSE Advisor, HSE Instructor, HSE Supervisor, Instrumentation Supervisor, Instrumentation Specialist, Project Coordinator, Crisis Communication & Emergency Response Specialist, Instrumentation Technician** and **Tank Farm Instrumentation Technician**.

Mr. Burnip has a **Bachelor's** degree in **Business Studies** from the **Somerset University (UK)**. He is a **Certified/Registered Tutor** in **NEBOSH** Certificate in Environmental Management, **NEBOSH** International General Certificate, **NEBOSH** International Certificate in Fire Safety & Risk Management, **NEBOSH** Process Safety Management Certificate and **NEBOSH** International Oil & Gas Certificate; a **Certified Safety Auditor (SAC)**; a **Certified ISO 45001 Auditor**; an **Environmental Health and Safety Management Specialist** on Fall Protection, Elevated Structures, Material Handling, Trenching & Excavations; a **Welding Brazing Safety Technician**; a **Certified Safety Administrator (CSA)** - General Industry; a **Safety Manager/Trainer** – General Industry; a **Petroleum Safety Manager (PSM)** - Drilling & Servicing; a **Petroleum Safety Specialist (PSS)** - Drilling & Servicing; a **Safety Planning Specialist**; a **Safety Training Specialist**; a **Certified Instructor/Trainer**; a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)** and further holds a Certificate in **Mechanical Engineering Craft Practice** from the **City & Guilds of London Institute**; a **NEBOSH Level 3 Construction Certificate (UK)**; and holds a **Cambridge Teaching Certificate**. He is a well-regarded member of the **National Association of Safety Professionals**, the **Association of Cost Engineers (UK)**, **Institution of Occupational Safety & Health (TechIOSH)** and an **Associate Member** of **World Safety Organization**. Further, he has conducted innumerable trainings, workshops and conferences worldwide.





Training Methodology

Our courses employ an interactive, learner-centred methodology that integrates theoretical knowledge with practical application. The training is delivered through a suitable combination of some or all of the following methods, selected according to the course content and learning objectives:

- Instructor-led presentations and facilitated discussions
- Practical workshops and participant presentations
- Hands-on exercises and real-world case studies
- Equipment demonstrations and technical drawings
- Hardware- and software-based simulations
- Gamification & Role Play in soft-skills courses only
- Virtual Reality (VR) and Augmented Reality (AR)
- Instructional videos and other relevant training resources

This blended approach encourages active participation, strengthens practical skills and supports the effective application of acquired knowledge in the workplace.

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.

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, 08th of November 2026

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0930	Introduction to API STD 780 <i>Purpose and Objectives of API STD 780 • Scope of Application across Petroleum and Petrochemical Industries • Relationship with Corporate Security Management • Benefits of a Standardized Security Risk Assessment (SRA)</i>
0930 – 0945	<i>Break</i>
0945 – 1030	Security Risk Management Principles <i>Risk Management Fundamentals • Security versus Safety Risk • Risk Management Lifecycle • Integration with Enterprise Risk Management</i>
1030 – 1130	Security Risk Assessment Concepts <i>Definition of Security Risk • Components of Security Risk • Relationship between Threat, Vulnerability and Consequence • Security Risk Terminology and Definitions</i>
1130 – 1215	Understanding Security Threats <i>Criminal Threats • Insider Threats • Terrorism and Sabotage • Emerging Cyber-Physical Threats</i>
1215 – 1230	<i>Break</i>
1230 – 1330	Security Consequences <i>Human Consequences • Environmental Consequences • Business Interruption • Reputation and Financial Impacts</i>



1330 – 1420	Overview of API's Five-Step SRA Methodology Step 1 – Characterization • Step 2 – Threat Assessment • Step 3 – Vulnerability Assessment • Steps 4 & 5 – Risk Evaluation and Countermeasures
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, 09th of November 2026

0730 – 0830	Security Risk Assessment Planning Planning Process • Defining Objectives • Establishing Assessment Boundaries • Resource Planning
0830 – 0930	Building the SRA Team Team Composition • Roles and Responsibilities • Required Competencies • Stakeholder Participation
0930 – 0945	Break
0945 – 1100	Defining Scope & Objectives Asset Selection • Facility Boundaries • Operational Assumptions • Risk Acceptance Criteria
1100 – 1215	Information Collection Facility Documentation • Process Information • Security Documentation • Operational Information
1215 – 1230	Break
1230 – 1330	Sources of Information Internal Data Sources • External Intelligence • Regulatory Requirements • Historical Records
1330 – 1420	Site Inspection & Previous Incident Analysis Conducting Site Walkthroughs • Identifying Critical Observations • Incident Investigation Review • Lessons Learned
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, 10th of November 2026

0730 – 0830	Asset Characterization Identifying Critical Assets • Asset Prioritization • Consequence Identification • Asset Documentation
0830 – 0930	Step 2 – Threat Assessment Threat Identification • Threat Likelihood Evaluation • Threat Ranking • Target Attractiveness
0930 – 0945	Break
0945 – 1100	Threat Intelligence Intelligence Sources • Threat Trends • Adversary Capabilities • Threat Credibility
1100 – 1215	Step 3 – Vulnerability Assessment Physical Vulnerabilities • Procedural Vulnerabilities • Personnel Vulnerabilities • Cyber Vulnerabilities
1215 – 1230	Break



1230 – 1330	Layers of Security Protection <i>Deterrence • Detection • Delay • Response</i>
1330 – 1420	Vulnerability Ranking <i>Ranking Methodology • Existing Safeguards • Residual Vulnerabilities • Documentation</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	<i>Lunch & End of Day Three</i>

Day 4: Wednesday, 11th of November 2026

0730 – 0830	Step 4 – Risk Analysis <i>Risk Calculation Methodology • Likelihood Evaluation • Consequence Evaluation • Risk Prioritization</i>
0830 – 0930	Risk Ranking <i>Risk Matrices • Risk Categories • Risk Acceptance Criteria • Decision-Making</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Step 5 – Countermeasure Identification <i>Risk Treatment Options • Security Improvements • Administrative Controls • Engineering Controls</i>
1100 – 1215	Evaluating Countermeasures <i>Effectiveness Evaluation • Cost-Benefit Considerations • Implementation Priorities • Residual Risk</i>
1215 – 1230	<i>Break</i>
1230 – 1330	Documentation & Reporting <i>Recording Assessment Results • Preparing Recommendations • Management Reporting • Action Tracking</i>
1330 – 1420	Validation & Follow-up <i>Review Process • Verification of Recommendations • Continuous Improvement • Reassessment Scheduling</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	<i>Lunch & End of Day Four</i>

Day 5: Thursday, 12th of November 2026

0730 – 0830	API Worksheets & Forms <i>Characterization Worksheet • Threat Assessment Worksheet • Vulnerability Assessment Worksheet • Recommendation Worksheet</i>
0830 – 0930	Petroleum Terminal Case Study <i>Asset Identification • Threat Assessment • Vulnerability Evaluation • Risk Prioritization</i>
0930 – 0945	<i>Break</i>
0945 – 1100	Refinery Case Study <i>Process Hazards • Security Scenarios • Countermeasure Selection • Lessons Learned</i>
1100 – 1230	Pipeline Security Assessment <i>Pipeline Threats • Remote Asset Protection • Critical Infrastructure Considerations • Risk Reduction Strategies</i>
1230 – 1245	<i>Break</i>



1245 – 1300	Transportation Security <i>Truck Transportation • Rail Transportation • Marine Transportation • Supply Chain Security</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>

Suggested Practical Exercises Throughout the Course

- Facility characterization workshop
- Threat identification exercise
- Security walkthrough simulation
- Vulnerability assessment workshop
- Risk ranking matrix exercise
- Countermeasure selection workshop
- Case study analysis
- Group presentation
- Final Security Risk Assessment project

Learning Outcomes

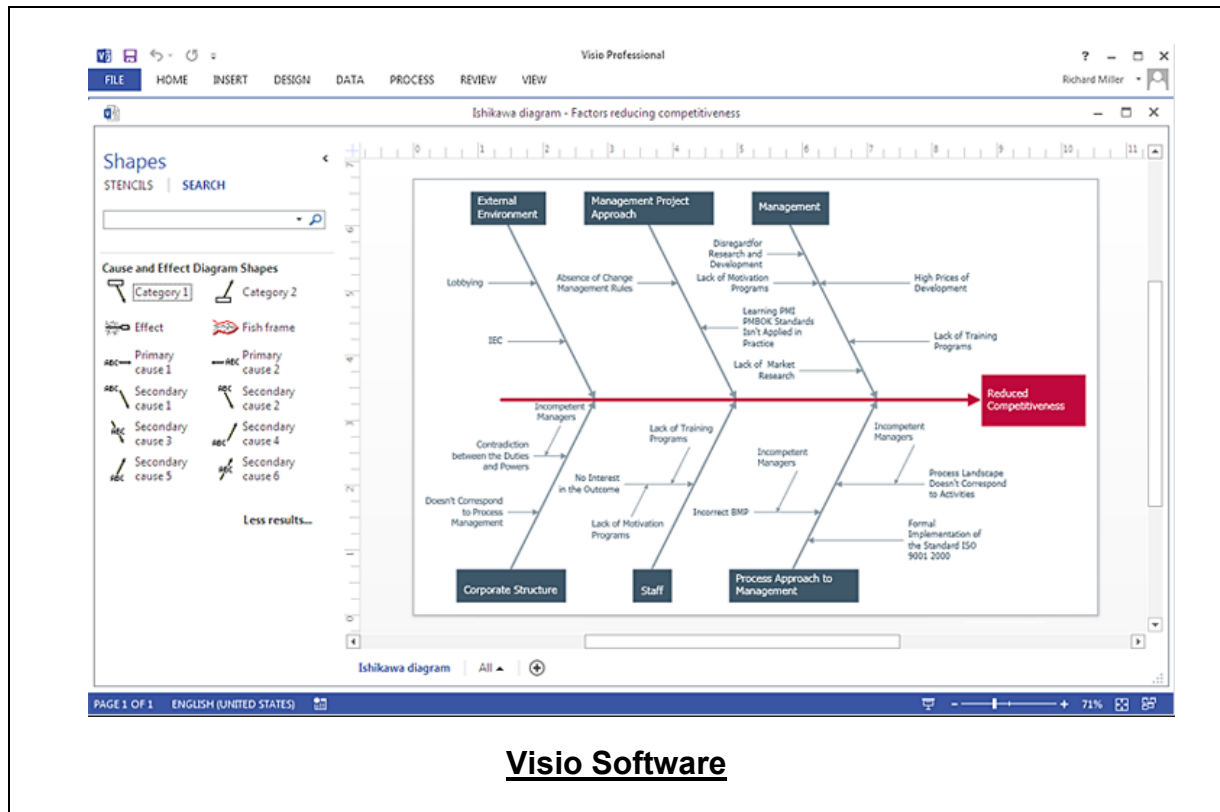
By the end of the course, participants will be able to:

- Explain the principles of API STD 780 Security Risk Assessment
- Plan and organize a structured Security Risk Assessment
- Build and facilitate an effective multidisciplinary SRA team
- Characterize assets and identify security threats
- Evaluate vulnerabilities using a systematic methodology
- Analyze and rank security risks using qualitative risk assessment techniques
- Develop practical and risk-based security countermeasures
- Document findings and prepare professional SRA reports
- Apply the methodology to terminals, refineries, pipelines, and transportation assets
- Support continuous improvement of security risk management programs

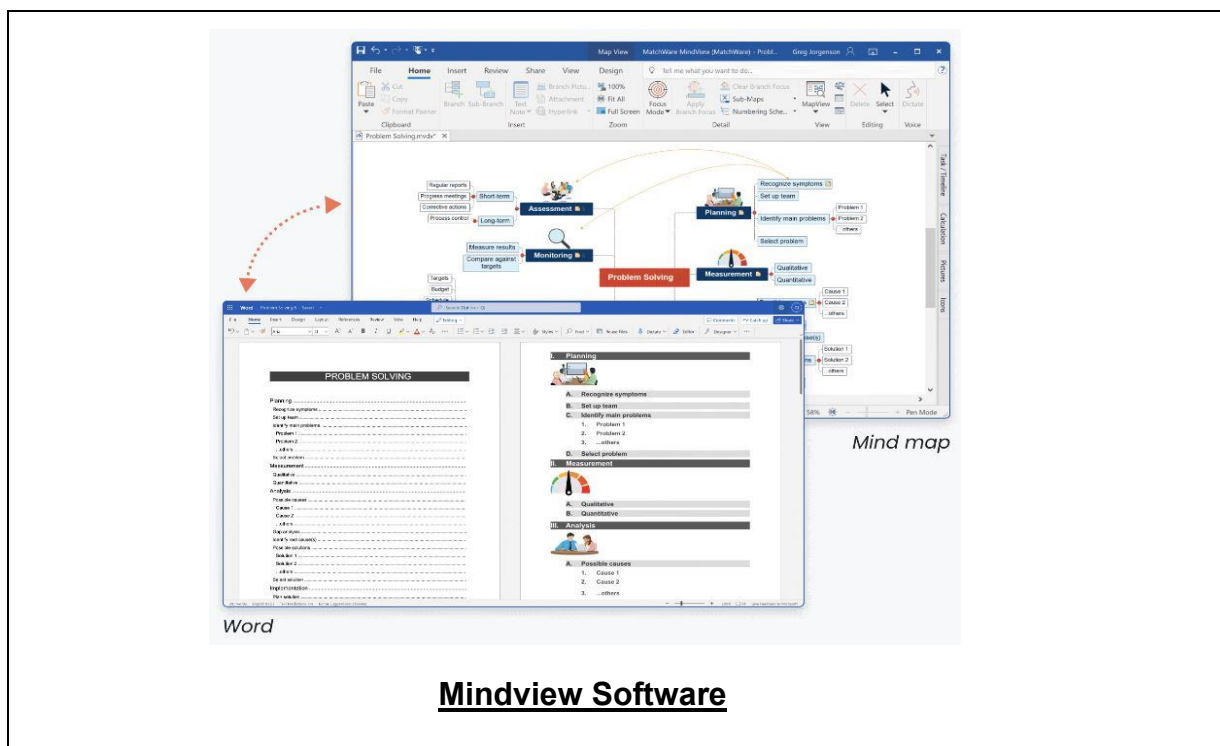


Simulators (Hands-on Practical Sessions)

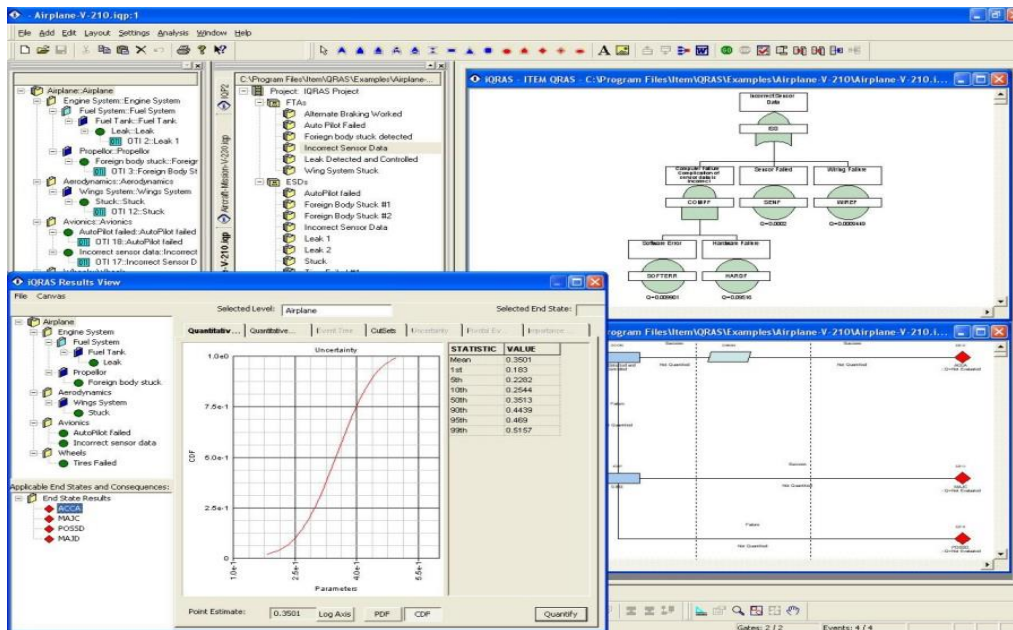
Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using our state-of-the-art “Visio”, “Mindview” and “QRA System” simulators.



Visio Software



Mindview Software



QRA System Simulator

Course Coordinator

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