COURSE OVERVIEW HE0749

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

September 22-26, 2024/Sarah Meeting Room, Al Bandar Rotana Dubai-Creek, Dubai, UAE

Course Reference

HE0749

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.

API developed the security risk assessment (SRA) methodology (API 780 Standard) as a universal approach for assessing security risk at petroleum and petrochemical industries. The information contained herein has been developed in cooperation with government and industry and is intended to help oil and gas companies, petroleum refiners, pipeline operators, petrochemical manufacturers, and other segments of the petroleum industry or other similar industries maintain and strengthen their corporate security through a structured and standardized SRA methodology. This course contains a standard methodology and guidance for use including examples.

This course describes a methodology that can be applied to a broad range of assets and operations beyond the typical operating facilities of the industry. This includes other assets containing hazardous materials such as chemical, refining and petrochemical manufacturing operations, pipelines and transportation operations including truck, marine and rail. It also can be used at a wide variety of non-hydrocarbon types of assets and is applicable as a general purpose SRA methodology. The methodology is suitable for assisting with compliance to regulations, such as the U.S. Department of Homeland Security's Chemical Facility Anti-terrorism Standards, 6 CFR Part 27.

Course Objectives

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

- Get certified as a *"Certified Security Risk Assessor (SRA)"*
- Define the terms, acronyms, abbreviations and symbols of security risk assessment
- Discuss general concepts of SRA covering security risk assessment and security management principles, risk definition for SRA and key variables, likelihood, consequences, threat, attractiveness and vulnerability
- Apply SRA approach including the concept and relationship to security risk management process, conducting and reviewing the SRA, validation and prioritization of risks and risk-based screening
- Employ proper planning in conducting SRA as well as gather, review and integrate information
- Identify the sources of information and the information needs
- Locate, collect and review required information
- Analyze previous incidents and conduct a site inspection
- Gather threat information using the various steps of API SRA
- Recognize forms and worksheets, SRA supporting data requirements and various examples of the SRA process

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 provides an overview of all significant aspects and considerations of security risk assessment 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 Fee

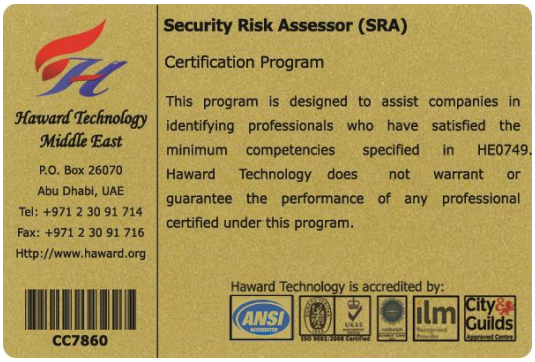
US$ 5,500 per Delegate + **VAT**. This rate includes H-STK® (Haward Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course 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.

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Page 1 of 1

Haward Technology Middle East

Continuing Professional Development (HTME-CPD)

CEU Official Transcript of Records

TOR Issuance Date: 09-Feb-17

HTME No. PAR11317

Participant Name: Abdullah Al Hajri

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE0749	API-780: Security Risk Assessment Methodology for the Petroleum & Petrochemical Industries	February 05-09, 2017	30	3.0

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

TRUE COPY

Maricel De Guzman
Academic Director

Haward Technology has been approved as an Authorized Provider by the International Association for Continuing Education and Training (IACET), 1760 Old Meadow Road, Suite 500, McLean, VA 22102, 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 | Fax: +971 2 3091 716 | E-mail: info@haward.org | Website: www.haward.org

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Certificate Accreditations

Certificates are accredited by the following international accreditation organizations: -

- 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. 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 **50 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**, H_2S, 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**, **H2s Training and Rescue with Respiratory Equipment**, Job Safety Analysis (**JSA**), **Work Permit & First Aid**, Project HSE Management System, Health & Hygiene Inspection, PTW Control, Process Modules Fire & Gas Commissioning, MSDS, Ergonomics, Lockout/Tagout, Fire Safety & Protection, Spill Prevention & Control, **Tower & Scaffold Inspection**, **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

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, 22nd of September 2024***

0730 – 0800	*Registration & Coffee*
0800 – 0815	*Welcome & Introduction*
0815 – 0830	***PRE-TEST***
0830 – 0930	***Introduction*** *Scope ● Sequential Activities ● Normative References ● Terms, Definitions, Acronyms, Abbreviations & Symbols*
0930 – 0945	*Break*
0945 – 1100	***API-780 SRA Concepts*** *General ● Security Risk Assessment & Security Management Principles ● Risk Definitions for SRA & Key Variables*
1100 – 1230	***HCIS New Security, Directives & Process***
1230 – 1245	*Break*
1245 – 1420	***API-780 SRA Concepts (cont'd)*** *Likelihood (L) ● Consequences (C) ● Threat (T)Attractiveness (A) ● Vulnerability (V) ● Locating Required Information ● Information Collection & Review ● Concept & Relationship to Security Risk Management Process*
1420 – 1430	***Recap***
1430	*Lunch & End of Day One*

Day 2: ***Monday, 23rd of September 2024***

0730 – 0930	***API-780 SRA Approach (1)*** *Validation & Prioritization of Risks Conducting & Reviewing the SRA*
0930 – 0945	*Break*
0945 – 1100	***API-780 SRA Approach (1) (cont'd)*** *Risk-based Screening ● Planning for Conducting a SRA ● SRA Team ● SRA Objectives & Scope ● Information Gathering, Review & Integration*
1100 – 1230	***API-780 SRA Approach (2)*** *Sources of Information ● Identifying Information Needs*
1230 – 1245	*Break*
1245 – 1420	***API-780 SRA Approach (2) (cont'd)*** *Locating Required Information ● Information Collection & Review*
1420 – 1430	***Recap***
1430	*Lunch & End of Day Two*

Day 3: Tuesday, 24th of September 2024

0730 – 0930	***API-780 Practical Hands on Real Exercise*** *API-780 SRA Approach Characterization ● Threat Assessment ● Vulnerability Assessment ● Risk Analysis/Ranking ● Identify Countermeasures ● Summary of Approach*
0930 – 0945	*Break*
0945 – 1100	***API-780 Forms & Worksheets*** *Characterization Form ● Threat Assessment Form ● Attractiveness Form Vulnerability Analysis & Risk Assessment Form ● Recommendation Form ● Residual Risk Based on Implementation of All Proposed Countermeasures ● Countermeasure Risk Score & Priority Form*
1100 – 1230	***Countermeasure Risk Score & Priority Form*** *Checklist Access Control, Security Force, Intrusion Detection, Perimeter and Building Barriers, etc.*
1230 – 1245	*Break*
1245 – 1420	***Information, Computers, Network & Intellectual Property Security***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Three*

Day 4: Wednesday, 25th of September 2024

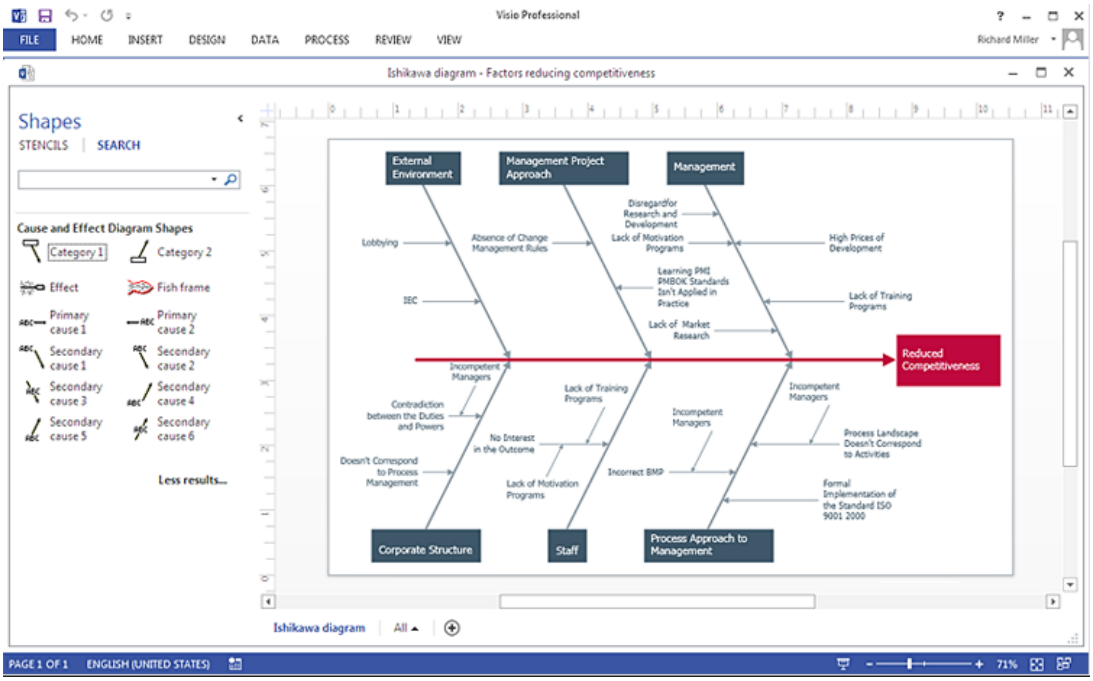
0730 – 0930	***Interdependency & External Infrastructure Checklists***
0930 – 0945	*Break*
0945 – 1100	***QRA Quantitative Risk Assessment Worked Real Onsite Case***
1100 – 1230	***QRA Quantitative Risk Assessment Worked Real Onsite Case (cont'd)***
1230 – 1245	*Break*
1245 – 1420	***Using Software to Collect & Update Risk Register***
1420 – 1430	***Recap***
1430	*Lunch & End of Day Four*

Day 5: Thursday, 26th of September 2024

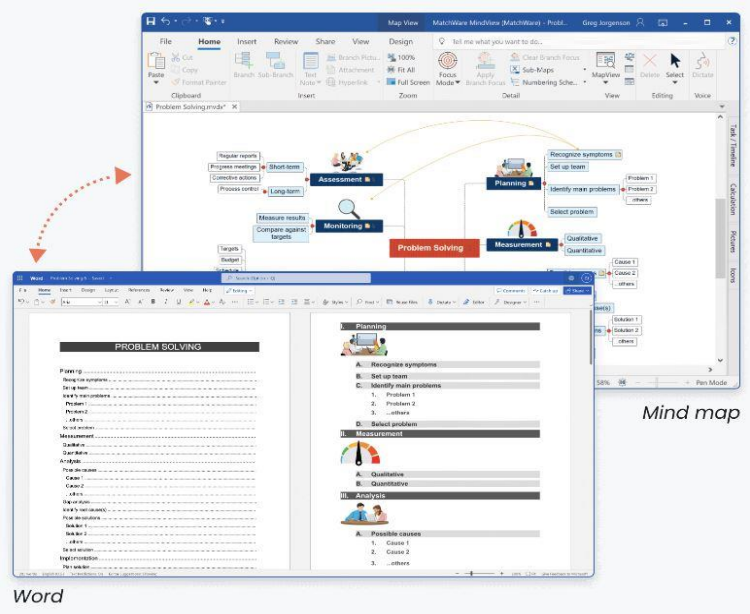
0730 – 0930	***Reviewing Worked Examples Against HCIS Requirements***
0930 – 0945	*Break*
0945 – 1100	***Setting the Road Map, Plan for Completing Comprehensive SRA***
1100 – 1230	***SRA Supporting Data Requirements, Meeting, Interviews, Etc.***
1230 – 1245	*Break*
1245 – 1300	***Security Situation Report & Recommendation for Capacity Build Up***
1300 – 1315	***Course Conclusion***
1315 – 1415	***COMPETENCY EXAM***
1415 – 1430	*Presentation of Course Certificates*
1430	*Lunch & End of Course*

Simulators (Hands-on Practical Sessions)

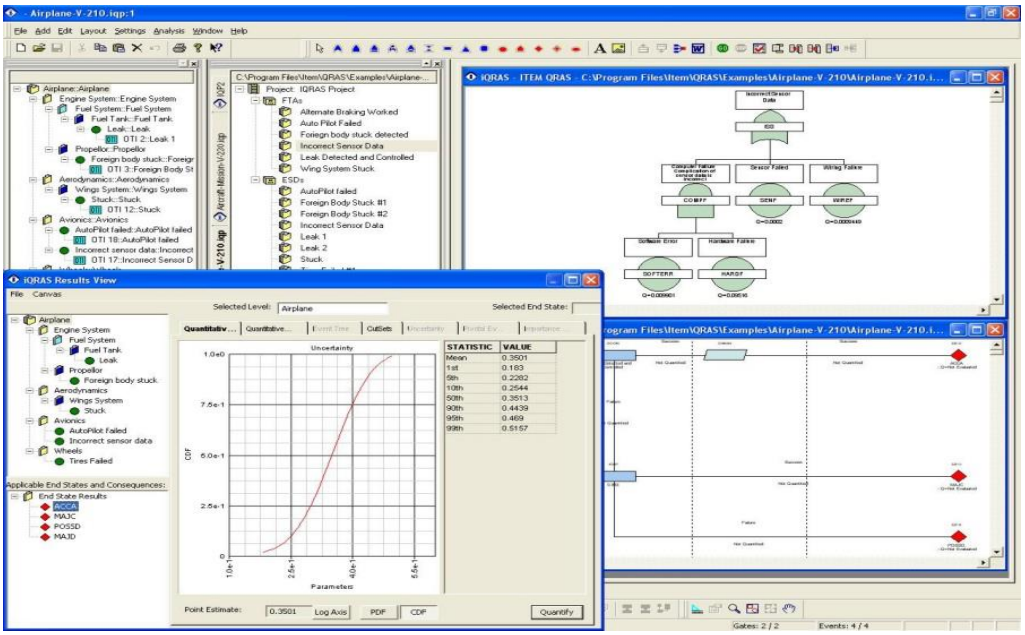
Practical sessions will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using our state-of-the-art "Visio", "Mindview" and "QRA System" simulators.



Visio Software



Mindview Software



QRA System Simulator

Course Coordinator

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