COURSE OVERVIEW HE1020-4D

Associate Safety Professional® (ASP®)

Exam Preparation Training

Course Title

Associate Safety Professional® (ASP®)
Exam Preparation Training

Course Date/Venue

November 04-07, 2024/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

Course Reference

HE1020-4D

Course Duration/Credits

Four Days/2.4. CEUs/24 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.

BCSP awards the Associate Safety Professional to individuals who demonstrate competency and work full-time in professional positions where at least 50% of duties are task devoted to the prevention of harm to individuals in the workplace environment. Whether your career goals include seeking a new position, moving up in your current organization or moving to private practice, you can accelerate your opportunities by achieving the Associate Safety Professional (ASP) certification.

The purpose of this course is to walk you through the process of applying for and taking the examination leading to the ASP certification. It provides you with in-depth information regarding the application process, examination process and the rules and procedures essential in retaining the ASP certification after you achieve it.

This course is designed to provide participants with a detailed and up-to-date overview of Associate Safety Professional®. It covers the chemistry and industrial hygiene calculations, electrical calculations, radiation calculations, structural and mechanical calculations, engineering control calculations and physics calculations.

The course will also discuss the financial principles, statistics, performance metrics and indicators; the safety management systems covering risk management, hazard control process, management process and project management; the system safety, fleet safety and safety programs; and the ergonomics covering human factors, measurement, monitoring and controls.

During this interactive course, participants will learn to employ fire prevention and protection; recognize fire and explosion hazards; apply fire control and emergency management; identify occupational health covering biological hazards and controls, chemical hazards and controls as well as physical hazards and controls; and carryout environmental management through environmental hazards identification, engineering controls, administrative controls & practices and hazardous waste storage & disposal.

Course Objectives

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

- Get prepared for the next ASP® exam and have enough knowledge and skills to pass such exam to get the ASP® certification
- Apply chemistry and industrial hygiene calculations, electrical calculations, radiation calculations, structural and mechanical calculations, engineering control calculations and physics calculations
- Discuss financial principles, statistics, performance metrics and indicators
- Carryout safety management systems covering risk management, hazard control process, management process and project management
- Implement system safety, fleet safety and safety programs
- Identify ergonomics covering human factors, measurement, monitoring and controls
- Employ fire prevention and protection and recognize fire and explosion hazards
- Apply fire control and emergency management
- Describe occupational health covering biological hazards and controls, chemical hazards and controls as well as physical hazards and controls
- Carryout environmental management through environmental hazards identification, engineering controls, administrative controls and practices and hazardous waste storage and disposal
- Apply training and education methods as well as communication and group dynamics

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 safety management for safety professionals who perform at least 50% of professional level safety duties including making worksite assessments to determine risks, potential hazards and controls, evaluating risks and hazard control measures, investigating incidents, maintaining and evaluating incident and loss records, and preparing emergency response plans. Other duties could include hazard recognition, fire protection, regulatory compliance, health hazard control, ergonomics, hazardous materials management, environmental protection, training, accident and incident, investigations, advising management, record keeping, emergency response, managing safety programs, product safety and/or security.

Eligibility: -

- Academic Requirement:-
  All individuals applying for the ASP must have a bachelor's degree or higher in any field from an accredited institution; or an associate in safety, health, or the environment. The associate degree must include at least four courses with at least 12 semester hours/18 quarter hours of study in the safety, health, or environmental domains covered in the ASP and CSP examination blueprints.

- Experience Requirement:-
  ASP candidates must have one-year professional safety experience to sit for the ASP exam. Professional safety experience must meet the following criteria to qualify:-
  * Professional safety must be the primary function of the position. Collateral duties in safety are not counted.
  * The position's primary responsibility must be the prevention of harm to people, property, or the environment, rather than responsibility for responding to harmful events.
  * Professional safety functions must be at least 50% of the position duties. BCSP defines full-time as at least 35 hours per week. Part-time safety experience is allowed if the applicant has the equivalent of at least 900 hours of professional safety work during any year (75 hours per month or 18 hours per week) for which experience credit is sought.
  * The position must be at a professional level. This is determined by evaluating the degree of professional charge by which there is a reliance of employees, employers or clients on the person's ability to identify, evaluate and control hazards through engineering and/or administrative approaches.
  * The position must have breadth of professional safety duties. This is determined by evaluating the variety of hazards about which the candidate must advise and the range of skills involved in recognizing, evaluating, and controlling hazards.

Required Calculator Model:-

The candidate is allowed to bring one or two calculators into the secure testing room as long as they both are among the brands and models listed:-

- Casio models FX-115, -250, -260 or -300
- Hewlett Packard models HP 9, 10, 12 or 30
- Texas Instruments models TI-30, -34, -35 or -36
- Different versions of the above models will be permitted. For example, the HP-30S and TI- 30X calculators will be permitted, as they are versions of these models. If the candidate does not have one of the approved calculators, he or she should use the online calculator that is part of the exam. Test centers do not provide calculators or allow candidates to bring in non-approved models.

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.

Accommodation

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

Course Fee

US$ 4,500 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)

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

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 **2.4 CEUs** (Continuing Education Units) or **24 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 Taljard is an **International Health**, **Safety & Environment** (**HSE**) **Expert** within **Oil**, **Gas** and **Petrochemical** industries. His expertise includes **Accident/Incident Investigation & Risk Management**, **Risk Assessment** within Production Operation, **Hazard Identification**, **Quantified Risk Assessment**, **Process Hazard Analysis** (**PHA**), **Construction Safety** (**STOP**), **Process Safety Management**, **HAZOP Studies & Leadership**, **FMEA**, Waste Management, Industrial Effluents, **Hazardous Material**, Chemical Handling, **Firefighting**, Emergency Response Services, **HAZCOM**, **HAZWOPER** and **HAZMAT** with over **30 years** of practical experience in the **process** industry. His wide experience also includes **Environmental Management** (**ISO 14001**), **Safety Management** (**OHSAS 18001**), **Quality Management** (**ISO 9001**). He is the **Founder** of **ISTEC**, an international health & safety management and consultancy company where he is greatly involved in the development and implementation of **SHEQ standards & procedures**, **HAZOP Studies**, **HAZOP Leadership**, **FMEA**, **PHA**, operational safety guidelines, inspections & auditing techniques.

While Mr. Taljard has been very active in the process industry for almost three decades, he has likewise headed Consultancy projects for major **petrochemical**, aviation, engineering & construction, mining & chemical industries. In all his projects, he utilizes a systems approach which includes **risk management**, **process safety**, health & environmental management, human behaviour and quality management. Furthermore, he has come to share his expertise through the **numerous international trainings** he has held on **PHA**, **HAZOP**, **Risk Assessment**, Handling **Hazardous Materials** & Chemicals, Petroleum Products Handling & Transportation, **Fire Fighting & Fire Rescue**, **Safety Auditing**, **Hazard Identification** & Site Inspection and **Accident Investigation** for several significant clientele among these are **ARAMCO**, **SABIC**, **ZADCO**, **ORPC**, **KOTC**, and **AADC**. Moreover, he completed various assignments as a consultant, trainer, facilitator, auditor & designer and conducted numerous licensed international Safety, Technology and Auditing Awareness & Implementing training courses including **IMS**, **ISO 9001**, **ISO 14001**, **ISO 27001**, **ISO 17799**, **OHSAS 18001** audits & assessments. With his accomplishments and achievements, he had been a **Safety Superintendent**, **Senior Safety Official** and **Senior Process Controller** for several international petrochemical companies.

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:

Domain 1: Mathematics (1 Day)	
Topic 1	***Chemistry & Industrial Hygiene Calculations*** ***Knowledge of:*** *1. Corrosives* *2. Flammables* *3. Toxic Materials* *4. Chemical Reactions*
Topic 2	***Mathematics: Electrical Calculations*** ***Knowledge of:*** *1. Power, Impedance, Energy & Resistance* *2. Arc Flash* *3. Circuits*
Topic 3	***Radiation Calculations*** ***Knowledge of:*** *1. Decay* *2. Half-life* *3. Source Strength*
Topic 4	***Structural & Mechanical Calculations*** ***Knowledge of:*** *1. Loading & Storage Capacity* *2. Rigging & Load*
Topic 5	***Engineering Control Calculations*** ***Knowledge of:*** *1. Ventilation & System Design* *2. Fire Suppression & System Design* *3. Noise* *4. Climate Conditions (e.g. WBGT, Wind Chill, Heat Stress)* *5. Fall Protection*
Topic 6	***Physics Calculations*** ***Knowledge of:*** *1. Movement (e.g., Acceleration, Velocity, Momentum)* *2. Friction* *3. Kinetic & Potential Energy* *4. Gas Laws*
Topic 7	***Financial Principles*** ***Knowledge of:*** *1. Cost Benefit Analysis (e.g., Cost of Risk)* *2. Life Cycle Cost* *3. Net Present Value* *4. Return on Investment*
Topic 8	***Statistics*** ***Knowledge of:*** *1. Descriptive Statistics (e.g., Central Tendency, Variability)* *2. Correlational Statistics (e.g., Pearson's r, Spearman's rho)* *3. Inferential Statistics (e.g., Chi-Square, T-Test)* *4. Probability (e.g., Odds of Success, Poisson)*

Topic 9	***Performance Metrics & Indicators*** ***Knowledge of:*** 1. *Lagging Indicators (e.g., Incidence Rates, Lost Time, Direct Costs of Incidents)* 2. *Leading Indicators (e.g., Inspection Frequency, Safety Interventions, Employee Performance Evaluations, Training Frequency, Near Miss, Near Hit, & Close Call Reporting)* 3. *Effects of Losses*
Domain 2: Safety Management Systems (1 Day)	
Topic 1	***Risk Management & Hazard Control Process*** ***Knowledge of:*** 1. *Identification Methods* 2. *Risk Analysis & Examination* 3. *Selection of Control Methods (e.g., Financial Justification, Hierarchy of Controls)* 4. *Implementation of Controls* 5. *Monitoring & Reevaluation* 6. *Risk Transfer (e.g., Insurance, Incident Management*
Topic 2	***Management Processes*** ***Knowledge of:*** 1. *Emergency, Crisis, Disaster Response Planning, Business Continuity* 2. *Incident Investigation (e.g., Data Collection, Analysis)* 3. *Inspections & Audits*
Topic 3	***Project Management*** ***Knowledge of:*** 1. *Evaluation of Cost, Schedule, Performance & Risk* 2. *Assigning Responsibilities & Accountability*
Topic 4	***System Safety*** ***Knowledge of:*** 1. *Risk Analysis Methods (e.g., Job Safety Analysis, Hazard & Operability Analysis, Failure Mode & Effects Analysis, Fault Tree Analysis, Fishbone, What-If & Checklist Analysis, Change Analysis* 2. *Process Safety Management*
Topic 5	***Fleet Safety*** ***Knowledge of:*** 1. *Driver Behavior (e.g., Defensive Driving, Distracted Driving)* 2. *Vehicle Inspections* 3. *Safety Features (e.g., Restraint Systems, Automatic & Anti-Lock Braking Systems)* 4. *Crash & Collision Investigation*
Topic 6	***Safety Programs*** ***Knowledge of:*** 1. *Hazard Communication & Globally Harmonized System* 2. *Workplace Violence* 3. *Control of Hazardous Energy* 4. *Excavation, Trenching, & Shoring* 5. *Confined Space* 6. *Physical Security* 7. *Fall Protection* 8. *Wellness Programs* 9. *Substance Abuse*

Domain 3: Ergonomics (0.5 Day)	
Topic 1	***Human Factors*** ***Knowledge of:*** 1. *Fitness for Duty* 2. *Organizational, Behavioral & Psychological Influences* 3. *Stressors* 4. *Risk Factors (e.g., Repetition, Force, Posture, Vibration)* 5. *Work Design* 6. *Aging Workforce*
Topic 2	***Measurement & Monitoring*** ***Knowledge of:*** 1. *Quantitative Methods (e.g., Anthropometry, NIOSH Lift Equation)* 2. *Qualitative Methods (e.g., Rapid Upper Limb Assessment (RULA), Rapid Entire Body Assessment (REBA))*
Topic 3	***Controls*** ***Knowledge of:*** 1. *Material Handling (e.g., Manual, Powered Equipment, Lifting Devices)* 2. *User-Centered Design* 3. *Human-Machine Interface* 4. *Work Practice Controls (e.g., Job Rotation, Work Hardening)* 5. *Written Plans, Procedures & Training*
Domain 4: Fire Prevention & Protection (0.5 Day)	
Topic 1	***Fire & Explosion Hazards*** ***Knowledge of:*** 1. *Chemical* 2. *Electrical (e.g., Static Electricity, Surge)* 3. *Natural Hazards (e.g., Lightning, Flooding, Drought)* 4. *Structural (e.g., Combustible, Non-Combustible)* 5. *Mechanical (e.g., Heat Generated by Friction)* 6. *Hot Work (e.g., Welding, Cutting, Brazing)*
Topic 2	***Fire Controls*** ***Knowledge of:*** 1. *Fire Science (e.g., Combustible Dust Fire Pentagon, Fire Triangle, Fire Tetrahedron)* 2. *Detection* 3. *Suppression* 4. *Segregation & Separation (e.g., Flammable Materials Storage, Ventilation)* 5. *Housekeeping* 6. *Grounding & Bonding*
Topic 3	***Fire & Emergency Management*** ***Knowledge of:*** 1. *Written Plans, Procedures & Work Practices (e.g., Incident Command System, Fire Brigade)* 2. *Life Safety (e.g., Elements of Design)*

Domain 5: Occupational Health (0.5 Day)	
Topic 1	***Biological Hazards & Controls*** ***Knowledge of:*** *1. Sources (e.g., Viral, Bacterial, Parasitic, Fungus)* *2. Exposure Assessment* *3. Control Strategies*
Topic 2	***Chemical Hazards & Controls*** ***Knowledge of:*** *1. Sources (e.g. Assessment, Control Strategies, Symptoms, Target Organs)* *2. Exposure Limits (e.g., PELs, TLVs, STELs, RELs)* *3. Routes of Entry (e.g., Inhalation, Ingestion, Absorption, Injection)* *4. Acute & Chronic Exposures* *5. Incompatibilities & Reactivity of Agents* *6. Nano-Technology*
Topic 3	***Physical Hazards & Controls*** ***Knowledge of:*** *1. Noise* *2. Vibration* *3. Radiation* *4. Electrical*
Domain 6: Environmental Management (1 Day)	
Topic 1	***Environmental Hazards*** ***Knowledge of:*** *1. Disaster Preparedness (e.g., Manmade, Natural)* *2. Environmental Hazards Awareness (e.g., Biological (Mold), Chemical, Waste, Vermin)* *3. Remediation* *4. Water (e.g., Storm, Waste, Permitting)* *5. Air (e.g., Quality, IAQ, Permitting)* *6. Land & Conservation (e.g., Solid Waste, Recycling, Sustainability)*
Topic 2	***Engineering Controls*** ***Knowledge of:*** *1. Air Pollution* *2. Segregation & Separation* *3. Substitution & Selection of Alternative Design Strategies* *4. Hazardous Materials Containment & Design* *5. Water Pollution* *6. Aboveground (AST) and Underground (UST) Storage Tanks* *7. Ventilation (e.g. HVAC, Local Exhaust)* *8. Land Pollution*
Topic 3	***Administrative Controls & Practices*** ***Knowledge of:*** *1. Conservation (e.g., Reuse, Recycle, Reduce)* *2. Housekeeping* *3. Warning (e.g., Signs, Signals)* *4. Written Plans, Procedures, Work Practices (e.g., Decontamination)* *5. Environmental Management System Standards* *6. Sustainability*

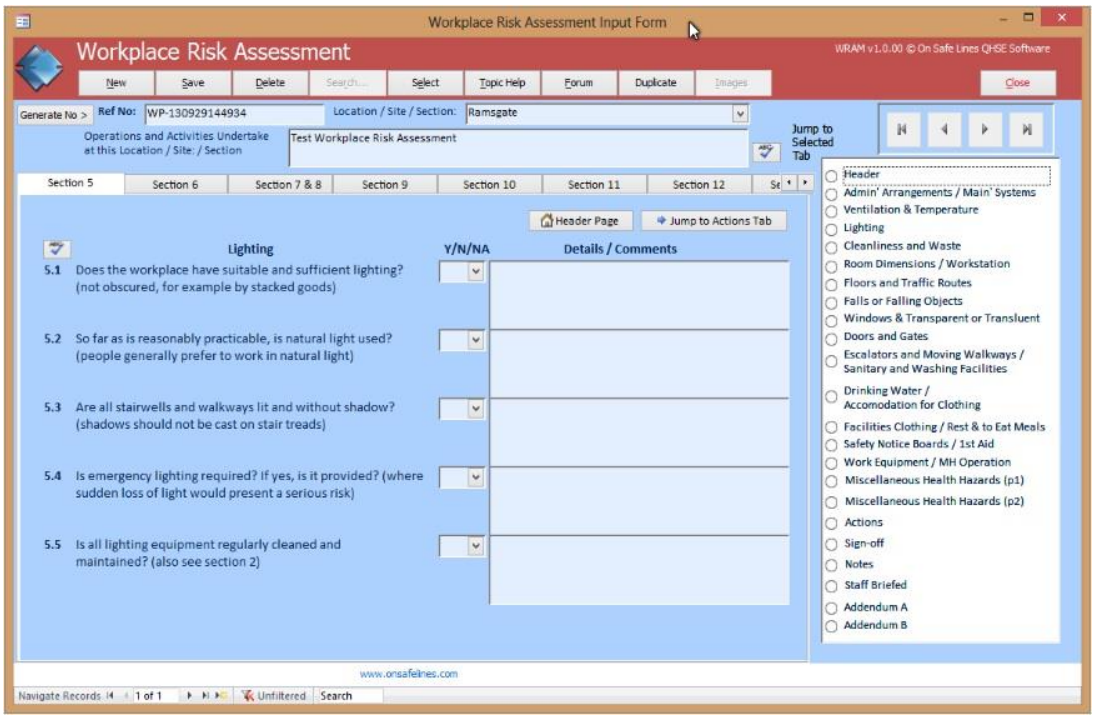
Topic 4	***Hazardous Waste Storage & Disposal*** ***Knowledge of:*** *1. Transportation (e.g., Placarding, Manifesting)* *2. Storage & Documentation* *3. Spill Prevention, Containment & Response)* *4. Waste Removal, Treatment & Disposal*
Domain 7: Training, Education & Communication (0.5 Day)	
Topic 1	***Training & Education Methods*** ***Knowledge of:*** *1. Adult Learning Theory & Techniques* *2. Data Collection, Needs Analysis & Feedback* *3. Behavior & Performance Modification* *4. Presentation Tools (e.g., Computer Based, Group Meeting)* *5. Assessing Competency*
Topic 2	***Communication & Group Dynamics*** ***Knowledge of:*** *1. Interpersonal Communication (e.g., Cross Generation)* *2. Methods of Facilitating Teams* *3. Multidisciplinary Teamwork* *4. Negotiation Strategy* *5. Conflict Resolution* *6. Mentoring*

MOCK Exam

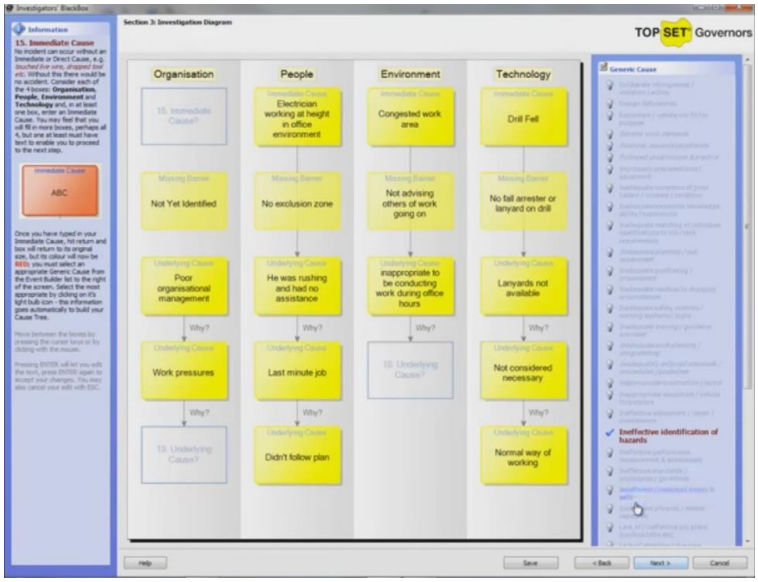
Upon the completion of the course, participants have to sit for a MOCK Examination similar to the exam of the Certification Body through Haward's Portal. Each participant will be given a username and password to log in Haward's Portal for the MOCK Exam during the 7 days following the course completion. Each participant has only one trial for the MOCK exam within this 7-day examination window. Hence, you have to prepare yourself very well before starting your MOCK exam as this exam is a simulation to the one of the Certification Body.

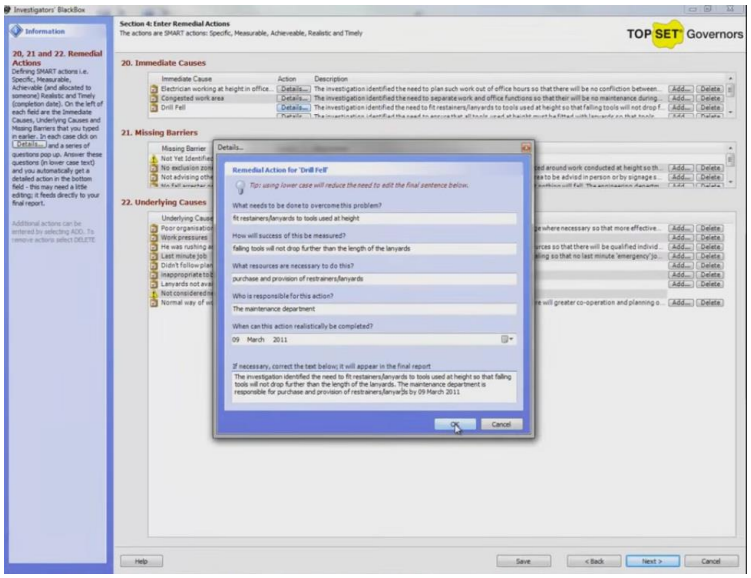
Simulator (Hands-on Practical Sessions)

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 our state-of-the-art "Workplace Risk Assessment", "BlackBox" and "QRA System" simulators.

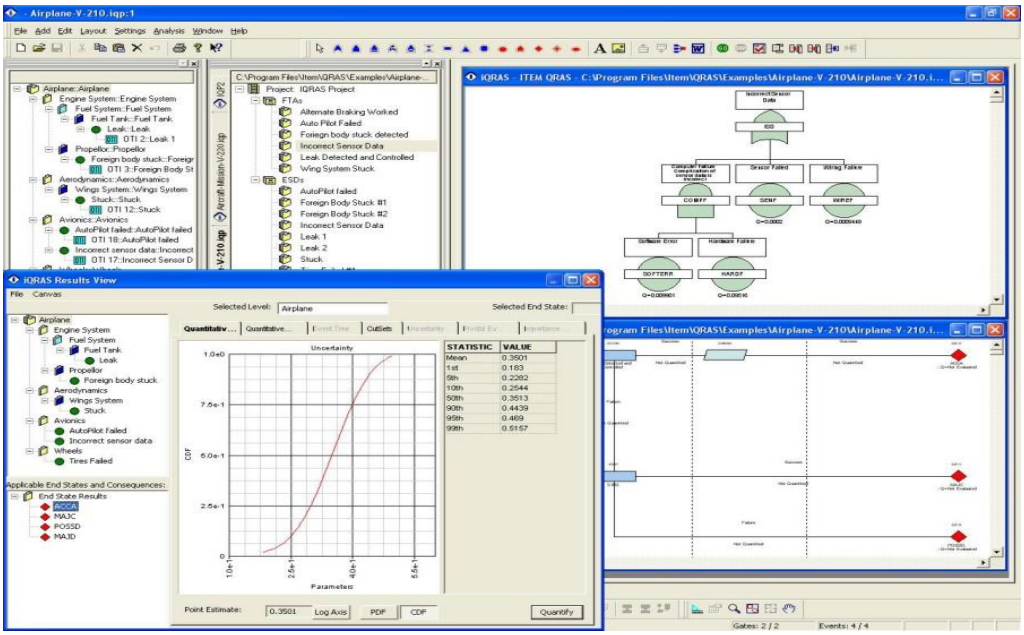


Workplace Risk Assessment





BlackBox Software Tool



QRA System Software

Course Coordinator

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