

COURSE OVERVIEW HE0851
Certified Incident Investigator

Incident Investigation & Reporting
 (NFPA, OSHA, API, ISO & ANSI Standards)

Course Title

Certified Incident Investigator: *Incident Investigation & Reporting (NFPA, OSHA, API, ISO & ANSI Standards)*

Course Date/Venue

November 04-08, 2024/Fujairah Meeting Room, Grand Millennium Al Wahda Hotel, Abu Dhabi, UAE

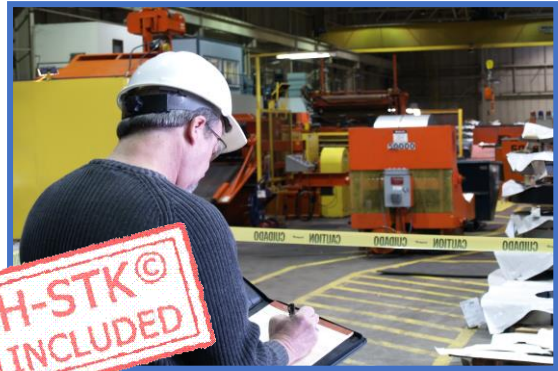
Course Reference

HE0851

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.



Incident investigation and reporting describe the process and responsibilities for internal reporting of HSE incidents which occurs in company's operational area or related to company's activity. A high percentage of incidents are caused by human error and lack of proper training. The number of such incidents may be greatly reduced by thorough investigation of incidents, establishing root causes, implementing effective corrective and preventative actions. This course is designed to introduce the attendees to established methods, of achieving this in a structured and proven manner.



This course is designed to provide participants with a comprehensive knowledge and skills on the techniques and procedures for incident investigation and reporting. It covers the incident and accident investigation process and the related company's procedures; the common causes of incidents and the various types of incident to investigate; the incident investigation techniques; the link between investigation and risk assessment, framework for incident investigation and analysis; and the analyses and commutate data.

The root cause analysis presented in this course is designed for use in investigating and categorizing the root causes of events with safety, health, environmental, quality, reliability and production impacts, although the exercises and case studies used in this course are predominantly those having safety and health impacts.

OSHA Incident [Accident] Investigations: A Guide for Employers (2015) will be used as guidance document provides participants with a systems approach to identifying and controlling the underlying or root causes of all incidents in order to prevent their recurrence. NFPA 921 will also be used to set the bar for scientific-based investigation and analysis of fire and explosion incidents.

By the end of the course, participants will be able to employ incident investigation to identify true root causes; recognize the root cause analysis, intermediate and root cause of incidents, cause tree analysis, fault tree analysis and events and causal factors analysis; carryout various strategies to ensure the organization learns from safety failures; employ structured data collection, investigating, interviewing and story boarding; apply applicable accident investigation procedures and investigate accidents and incidents in a professional manner; develop conclusions and recommendations; illustrate company's HSE incidents reporting flow diagram; and perform proper incident reporting.

API RP 585, Pressure Equipment Integrity Incident Investigation, recommended practice will be used as case study during the course in addition to API Investigation Tiers and Root Cause Analysis

Course Objectives

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

- Get certified as a “*Certified Incident Investigator*”
- Apply and gain a good working knowledge on incident reporting and investigation
- Discuss incident and accident investigation process and define related company's procedures
- Identify the common causes of incidents and the various types of incident to investigate
- Prevent, report and apply incident investigation techniques
- Determine the link between investigation and risk assessment as well as the framework for incident investigation and analysis
- Collect analyses and commutate data
- Employ incidents investigation to identify true root causes
- Recognize the root cause analysis, intermediate and root cause of incidents, cause tree analysis, fault tree analysis and events and causal factors analysis
- Carryout various strategies to ensure the organization learns from safety failures
- Employ structured data collection, investigating, interviewing and story boarding
- Apply applicable accident investigation procedures and investigate accidents and incidents in a professional manner
- Develop conclusions and recommendations, illustrate company's HSE incidents reporting flow diagram and proper incident reporting
- Recognize OSHA Incident [Accident] Investigations, NFPA 921, API RP 585, and ISO 45001 standards

Exclusive Smart Training Kit - H-STK®



Participants of this course will receive the exclusive “Howard 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**.

Applicable Codes & Standards

This course is based on the following Codes & Standards: -

- NFPA (National Fire Protection Association) 921 Standard: This standard provides guidelines for fire and explosion investigations, including procedures for evidence collection and analysis, and guidelines for determining the origin and cause of a fire or explosion.
- OSHA (Occupational Safety and Health Administration) Standards: OSHA provides guidelines for employers to follow in the event of a workplace incident. The guidelines include reporting requirements, investigations, and corrective actions to prevent future incidents.
- API (American Petroleum Institute) RP (Recommended Practice) 754: This standard provides guidelines for process safety performance measurement, including incident investigation, root cause analysis, and corrective action implementation.
- ISO (International Organization for Standardization) 45001 Standard: This standard provides guidance for establishing and maintaining an Occupational Health and Safety Management System (OHSMS). It includes guidelines for conducting incident investigations, analyzing root causes, and implementing corrective actions.
- ANSI (American National Standards Institute) Z16.2 Standard: This standard provides a framework for conducting incident investigations and includes guidelines for reporting and analysis.

Who Should Attend

This course provides an overview of all significant aspect and considerations of incident investigation and reporting for managers, team leaders, engineers, superintendents, supervisors and those in-charge of incident investigation or reporting.

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® (Howard Smart Training Kit), buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

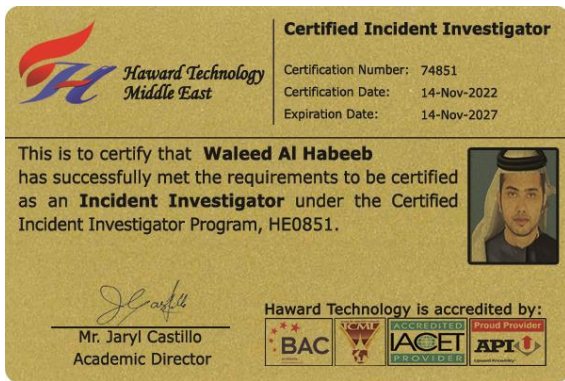
Course Certificate(s)

- (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 Incident Investigator". Certificates are valid for 5 years.

Recertification is FOC for a Lifetime.

Sample of Certificates

The following are samples of the certificates that will be awarded to course participants:-



- (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-22
HTME No. 74851
Participant Name: Waleed Al Habeeb

Program Ref.	Program Title	Program Date	No. of Contact Hours	CEU's
HE0851	Certified Incident Investigator	November 10-14, 2022	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 Authorized 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 1-2013 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 | 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.

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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.

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 Instructor(s)

This course will be conducted by the following instructor(s). However, we have the right to change the course instructor(s) prior to the course date and inform participants accordingly:



Mr. Andrew Ladwig is a **Senior Process & Mechanical Engineer** with over **25 years** of extensive experience within the **Oil & Gas, Refinery, Petrochemical & Power** industries. His expertise widely covers in the areas of **Ammonia Manufacturing & Process Troubleshooting, Distillation Towers, Crude Oil Distillation, Fundamentals of Distillation** for Engineers, **Distillation Operation and Troubleshooting, Advanced Distillation Troubleshooting, Distillation Technology, Vacuum Distillation, Ammonia Storage & Loading Systems, Ammonia Plant Operation, Troubleshooting & Optimization, Ammonia Recovery, Ammonia Plant Safety, Hazard of Ammonia Handling, Storage & Shipping, Operational Excellence in Ammonia Plants, Fertilizer Storage Management (Ammonia & Urea), Fertilizer Manufacturing Process Technology, Sulphur Recovery, Phenol Recovery & Extraction, Wax Sweating & Blending, Petrochemical & Fertilizer Plants, Nitrogen Fertilizer Production, Petroleum Industry Process Engineering, Refining Process & Petroleum Products, Refinery Planning & Economics, Safe Refinery Operations, Hydrotreating & Hydro-processing, Separators in Oil & Gas Industry, Gas Testing & Energy Isolations, Gas Liquor Separation, Industrial Liquid Mixing, Wax Bleachers, Extractors, Fractionation, Operation & Control of Distillation, Process of Crude ATM & Vacuum Distillation Unit, Water Purification, Water Transport & Distribution, Steam & Electricity, Flame Arrestors, Coal Processing, Environmental Emission Control, R&D of Wax Blending, Wax Molding/Slabbing, Industrial Drying, Principles, Selection & Design, Certified Process Plant Operations, Control & Troubleshooting, Operator Responsibilities, Storage Tanks Operations & Measurements, Process Plant Troubleshooting & Engineering Problem Solving, Process Plant Performance, Efficiency & Optimization, Continuous Improvement & Benchmarking, Process Troubleshooting Techniques, Oil & Gas Operation/Introduction to Surface Facilities, Pressure Vessel Operation, Process Equipment Performance & Troubleshooting, Plant Startup & Shutdown, Startup & Shutdown the Plant While Handling Abnormal Conditions, Flare & Relief System, Process Gas Plant Start-up, Commissioning & Problem Solving, Process Liquid and Process Handling & Measuring Equipment. Further, he is also well-versed in **Compressors & Turbines** Operation, Maintenance & Troubleshooting, **Heat Exchanger Overhaul & Testing Techniques, Balancing of Rotating Machinery (BRM), Pipe Stress Analysis, Valves & Actuators** Technology, Inspect & Maintain **Safeguarding Vent & Relief System**, Certified Inspectors for **Vehicle & Equipment**, Optimizing **Equipment Maintenance & Replacement Decisions**, Certified Maintenance Planner (**CMP**), Certified Planning and Scheduling Professional (**AACE-PSP**), **Tank Design**, Construction, Inspection & Maintenance, **Material Cataloguing**, Specifications, Handling & Storage, **Steam Trap Design**, Operation, Maintenance & Troubleshooting, **Steam Trapping & Control, Column, Pump & Exchangers**, Troubleshooting & Design, **Rotating Equipment** Operation & Troubleshooting, **Control & ESD System, Detailed Engineering Drawings, Codes & Standards, Budget Preparation, Allocation & Cost Control, Root Cause Analysis (RCA), Production Optimization, Permit to Work (PTW), Project Engineering, Data Analysis, Process Hazard Analysis (PHA), HAZOP Study, Sampling & Analysis, Training Analysis, Job Analysis** Techniques, Storage & Handling of **Toxic Chemicals & Hazardous Materials, Hazardous Material** Classification & Storage/Disposal, **Dangerous Goods**, Environmental Management System (**EMS**), Supply Chain, Purchasing, Procurement, **Logistics** Management & **Transport & Warehousing & Inventory, Risk Monitoring** Authorized Gas Tester (**AGT**), Confined Space Entry (**CSE**), Personal Protective Equipment (**PPE**), Fire & Gas, First Aid and Occupational Health & Safety.**

During his career life, Mr. Ladwig has gained his practical experience through his various significant positions and dedication as the **Mechanical Engineer, Project Engineer, Reliability & Maintenance Engineer, Maintenance Support Engineer, Process Engineer, HSE Supervisor, Warehouse Manager, Quality Manager, Business Analyst, Senior Process Controller, Process Controller, Safety Officer, Mechanical Technician, Senior Lecturer** and **Senior Consultant/Trainer** for various companies such as the Sasol Ltd., Sasol Wax, Sasol Synfuels, just to name a few.

Mr. Ladwig has a **Bachelor's** degree in **Chemical Engineering** and a **Diploma in Mechanical Engineering**. Further, he is a **Certified Instructor/Trainer**, a **Certified Internal Verifier/Assessor/Trainer** by the **Institute of Leadership & Management (ILM)** and has delivered various trainings, workshops, seminars, courses and conferences internationally.

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, 04th of November 2024

0730 – 0800	<i>Registration & Coffee</i>
0800 – 0815	<i>Welcome & Introduction</i>
0815 – 0830	PRE-TEST
0830 – 0900	<i>Introduction to Incident Investigation</i>
0900 – 0930	<i>Principles of Accident Investigation</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Benefits of Accident Prevention</i>
1030 – 1120	<i>Company's Related Definitions/Procedures</i>
1120 – 1230	<i>Common Causes of Incidents</i>
1230 – 1245	<i>Break</i>
1245 – 1320	<i>Company's Definitions for Incidents, Near Misses, etc</i>
1320 – 1420	<i>Types of Incident to Investigate</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day One</i>

Day 2: Tuesday, 05th of November 2024

0730 – 0830	<i>Preventing Incidents</i>
0830 – 0930	<i>Reporting Incidents</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Incident Investigations</i>
1030 – 1120	<i>Investigation Techniques</i>
1120 – 1230	<i>Accident Reporting & Scope of Investigation</i>
1230 – 1245	<i>Break</i>
1245 – 1330	<i>Accident Investigation Process using ISO 45001 Clause 10.2</i>
1330 – 1420	<i>Stages of Accident Investigation</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day Two</i>

Day 3: Wednesday, 06th of November 2024

0730 – 0830	<i>On Site Investigation Process</i>
0830 – 0930	<i>The Link between Investigation & Risk Assessment</i>
0930 – 0945	<i>Break</i>
0945 – 1030	<i>Framework for Incident Investigation & Analysis</i>
1030 – 1120	<i>Root Cause Analysis</i>
1120 – 1230	<i>Identifying Intermediate & Root Causes of Incidents using OSHA Incident [Accident] Investigations: A Guide for Employers</i>
1230 – 1245	<i>Break</i>
1245 – 1330	<i>Cause Tree Analysis</i>
1330 – 1420	<i>Fault Tree Analysis</i>
1420 – 1430	<i>Recap</i>
1430	<i>Lunch & End of Day Three</i>

Day 4: Thursday, 07th of November 2024

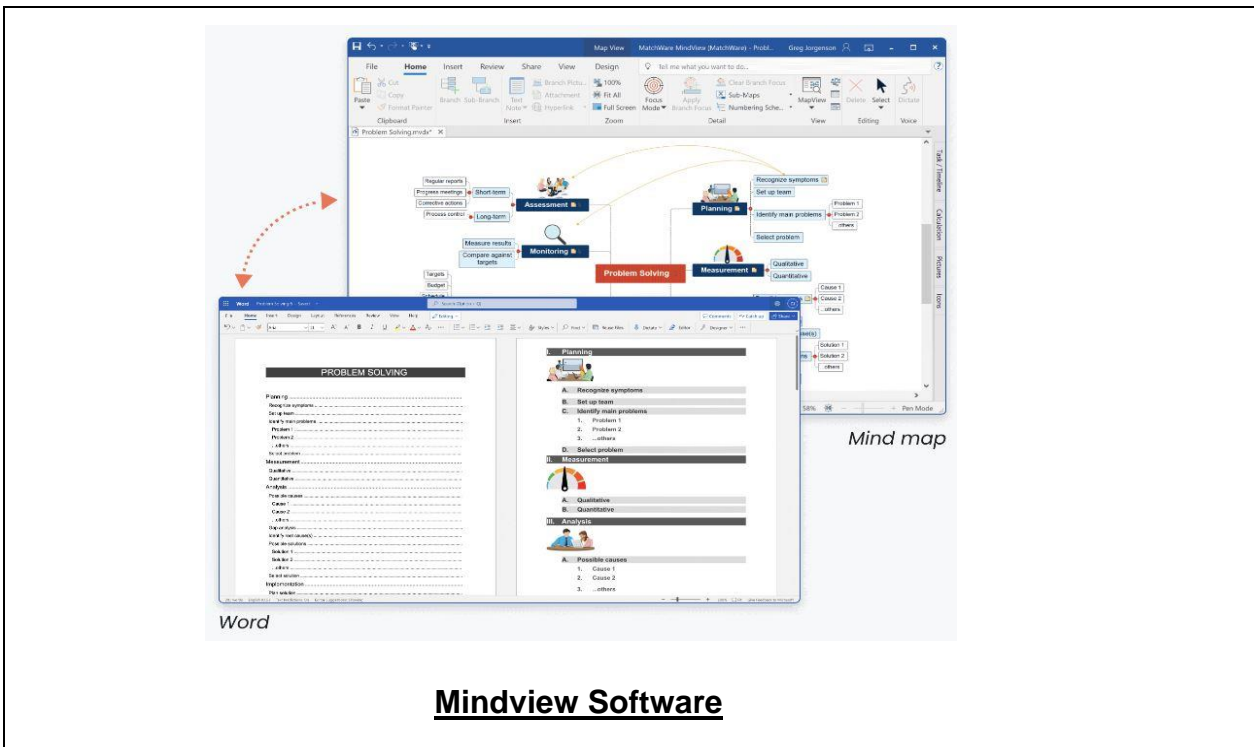
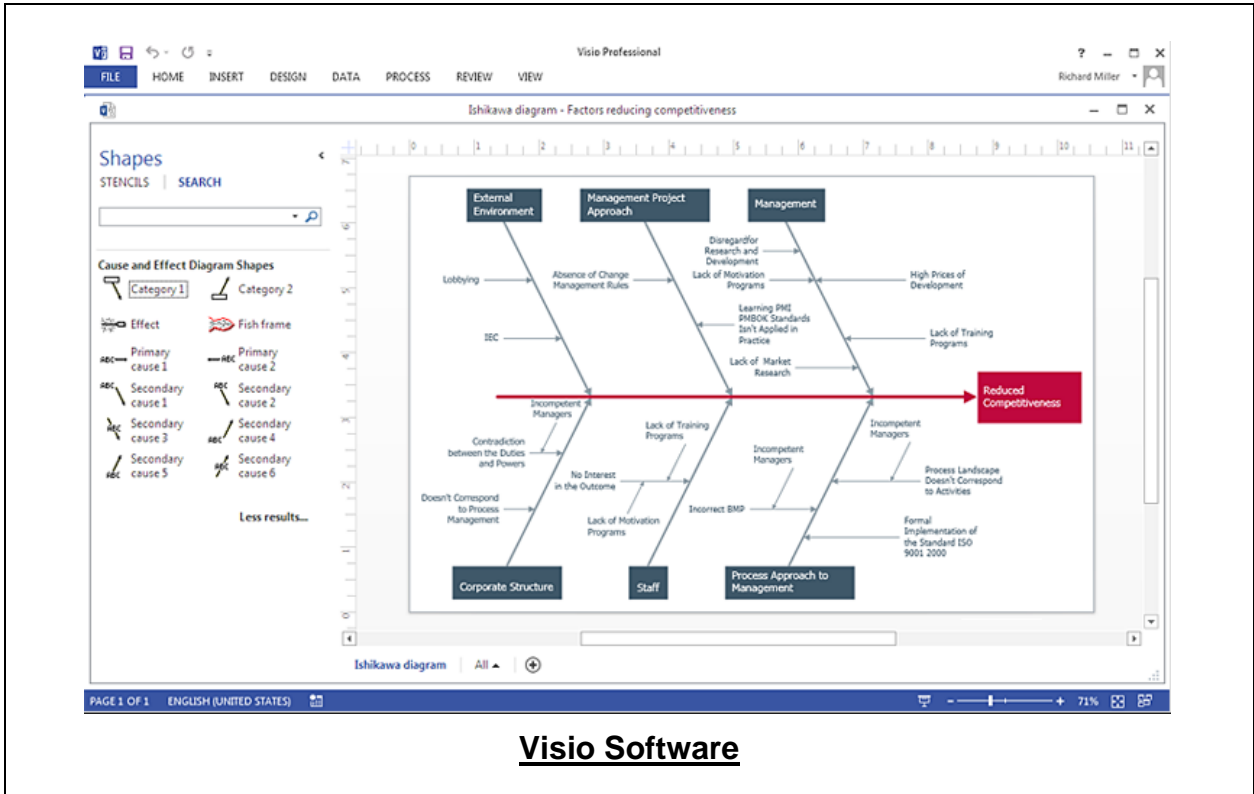
0730 – 0830	Basic Competencies of Human Factors
0830 – 0930	Events & Causal Factors Analysis
0930 – 0945	Break
0945 – 1100	Data to Include in Investigation Reports
1100 – 1230	Structured Data Collection
1230 – 1245	Break
1245 – 1330	Investigating Incident using ISO 45001 Step 1: Preserve & Document the Scene • Step 2: Collect Information • Step 3: Determine the Root-causes • Step 4: Implement Corrective Actions • Step 5: Feedback to Person(s) Reporting the Incident
1330 – 1420	Witness Interview Techniques
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 Four

Day 5: Friday, 08th of November 2024

0730 – 0830	Storyboarding, ISO 45001 Incident Reporting & Investigation Procedure Template
0830 – 0930	Developing Conclusions & Recommendations
0930 – 0945	Break
0945 – 1030	Company's HSE Incidents Reporting Flow Diagram
1030 – 1120	Reporting Incidents on My HSSE
1120 – 1215	Practical Exercise on Root Cause Analysis (Examples of Incidents and Workshop to Investigate a Sample) using NFPA 921 of Fire & Explosion Incidents
1215 – 1230	Break
1230 – 1300	Practical Exercises & Case Study using API RP 585, Pressure Equipment Integrity Incident Investigation & Recommended Practice
1300 – 1315	Course Conclusion
1315 – 1415	COMPETENCY EXAM
1415 – 1430	Presentation of Course Certificates
1430	Lunch & End of Course

Simulator (Hands-on Practical Sessions)

Practical session will be organized during the course for delegates to practice the theory learnt. Delegates will be provided with an opportunity to carryout various exercises using the simulator “Visio” and “Mindview” simulator”.



Course Coordinator

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