



Health, Safety and Environment

Hazard Identification, Communication & Risk Assessment

Course Introduction

Risk Assessment

The training module Hazard Identification and Risk Assessment has been designed to introduce the attendees to the importance of hazard identification on a daily basis. Hazards and risks are part of every workplace and require a col-laborative approach from all employees to ensure safety is achieved. This training module will include the principles of hazard identification and risk assessment which are then to be applied to all aspects of the work. The occurrences of workplace accidents are often due to the ignorance of hazards and risk. To prevent and minimize ill health and injuries, organizations need to realise workplace hazards are root cause of problems. The course addresses the topic of the potentially hazardous situations we face every day.

Occupational Safety and Health Administration

Often the consequences of hazards are not severe or they are presented in a form we are familiar with so we are able to effectively cope with them. The ability to recognize hazards, assess their potential severity and place controls to mitigate the severity is fundamental to a safety design and workplace. By understanding the basic types of hazards, participants will be able to conduct effective workplace hazard assessments and develop safeguards/controls to reduce or eliminate their severity. Common process hazards will be examined in detail. Participants will understand the difference between a hazard and a risk, the components of risk, and be provided a sound fundamental base for future Process Hazard Analysis learning. In addition, how to determine probability, the importance of the "As Low As Reasonably Possible" concepts, and various risk assessment methodologies will be presented. The Hazard Communication (HAZCOM) training module meets Occupational Safety and Health Administration guidelines for training and awareness pertaining to the hazard communications standard, this module fulfils basic requirements for employees who may be exposed to hazardous chemicals. The module further fulfils the basic requirements outlined in Occupational Safety and Health guidelines.

Target Audience

- Hazard Analysis
- Environmental Specialist
- Emergency Response Specialist
- Occupational Safety and Health Specialist

Learning Objectives

- Develop a comprehensive approach to hazard identification appropriate for your workplace
- Assess the hazards in your workplace, and determine which ones should be eliminated or controlled first
- Identify the types of hazard controls that are commonly used in various situations
- Implement a hazard control program
- Assess the effectiveness of the control measures implemented
- Investigate and report accidents and incidents
- Conduct Workplace Inspections
- Determine personal protective equipment and clothing requirements
- Understand and put in place 'Working at Height' protective procedures
- Develop and put in place traffic safety management plans
- Ensure that they manage contractors formally and safely
- Understand the forms and Definitions associated with Hazard Communications

Course Outline

- DAY 01

Module (01) Hazard Identification and Awareness

- 1.1 A Basic Introduction Hazard Recognition and Assessment
- 1.2 Explore The Various Tools Used in Industry Used to Assess Hazards
- 1.3 To Examine Some Common Hazards in Detail with Emphasis On Process Related Hazards

• Day 02

1.4 Practice Hazard Identification Using Real Examples

- 1.5 Understand The Various Types of Safeguards and Controls to Reduce Hazard Severity
- 1.6 The Different Types of Hazards That Could Be Present in Your Work Environment
- 1.7 Increased Situational Awareness Regarding the Hazard Recognition, Assessment and Control
- 1.8 Effective Reporting Methodologies

• Day 03

Module (02) Practical Risk Assessment

- 2.1 The Basic Concepts and Methodologies of Risk That Can Apply to Tasks of Any Size from Hands On Maintenance to Full Scale Process Facilities
- 2.2 Understanding of The Difference Between a Hazard and A Risk and The Components of Risk
- 2.3 Provide A Sound Fundamental Base for Future Learning
- 2.4 Fundamentals of Risk and Risk Management
- 2.5 How to Determine Probability
- 2.6 The Importance and Concept of “As Low as Reasonably Practical” ALRP
- 2.7 Various Risk Assessment Methodologies
- 2.8 Risk Control Concepts
- 2.9 Introduction to A Few Other, More Complex, Risk Assessment Methodologies

• Day 04

Module (03) Hazard Identification & Risk Assessment Methodologies

- 3.1 Hazard Operability (HAZOP)
- 3.2 Failure Mode and Effect Analysis (FMEA)
- 3.3 Fault Tree Analysis (FTA)
- 3.4 Event Tree Analysis (ETA)
- 3.5 Job Safety Analysis
- 3.6 Documentation of HIRA & Selection of Appropriate Approaches

- 3.7 Designing and implementing a Risk Control Plan
- **Day 05**

Module (04) Hazard Communication

- 4.1 Introduction
- 4.2 Hazard Communication Standard Overview
- 4.3 Review of Common Health Effects
- 4.4 Overview of Chemical Hazards
- 4.5 Measurement and Exposure Limits
- 4.6 Other Ways to Communicate Hazards
- 4.7 Controlling Hazards
- 4.8 Emergencies and First Aid

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 14, 2025	April 18, 2025	5 days	2150.00 \$	Virtual - Online
July 14, 2025	July 18, 2025	5 days	4950.00 \$	Spain - Madrid
Oct. 13, 2025	Oct. 17, 2025	5 days	4250.00 \$	UAE - Dubai