

# **Engineering Health, Safety, and Risk Responsibilities**

**Duration:** 5 Days

Language: en

Course Code: PO2-113

# **Objective**

Upon completion of this course, participants will be able to:

- Understand the importance of health and safety within an organisation.
- Assess how and why incidents may occur.
- Identify hazards utilising different methods and techniques.
- Evaluate the short and long-term effects of incidents on business productivity.
- Review what records and documents must be created and maintained when conducting risk assessments.
- Account for regional and international health and safety regulations.
- Explain what health and safety circumstances are commonly faced within the industry.
- Advise on the ideal practices to reduce risk.
- Assess what control measures can be applied to manage risk.

## **Audience**

This course is designed for anyone in the engineering industry responsible for maintaining health and safety. It would be most beneficial for:

- HSE Personnel
- Engineering Project Managers
- Construction/Site Supervisors
- Construction/Site Managers
- Engineering Directors
- Process Safety Managers
- Operation Managers
- Chief Engineering Officers (CEOs)

## **Training Methodology**

This course uses a variety of adult learning styles to aid full understanding and comprehension. Participants will review real-world examples of risk management documents to highlight risk areas and what factors may lead to accidents.

They will be supplied with all the necessary tools and equipment to conduct the learning exercises effectively. A combination of video materials, presentations, and practical activities will provide ample opportunities for participants to develop their knowledge and practical skills related to the taught content. Furthermore, they will be able to create their own risk management plans about their respective roles to gain a full understanding of the processes.

## **Summary**

Within the ever-growing engineering industry, there is an increasing potential for minor and major accidents to occur, especially if an organisation is not fully risk-aware.

As an engineer and those in a leadership or management position, it is incredibly important to be fully competent and aware of the risks associated with the industry. Risk management aims to identify hazards, document risks, and create and implement control methods. A vast number of methods can be utilised to analyse risks and aid in establishing preventative measures, and these can be extremely beneficial as they can help negate the potential for human error.

Enforcing stricter health and safety processes is essential for an organisation to maintain peak productivity. Major incidents can impact funds and assets and lead to engineers' injuries. Complete knowledge and understanding of risk management can enable a business to function to its maximum potential.

### **Course Content & Outline**

#### Section 1: Fundamentals of Health and Safety

- Defining health and safety.
- Understanding the role health and safety serves within an engineering organisation.
- What are the driving factors in maintaining health and safety?
- Construction Projects Legislation (ILO & EU).
- Accident and incident causation.
- Principles of risk assessments.
- Fire safety and preparation Fire extinguishers, fire blankets, alarms.

#### Section 2: Health and Safety Plans

- Constructing project health and safety plans.
- Project excavations and confined spaces.
- Major incidents and how they occur.
- Environmental factors that contribute to health and safety.
- Identifying hazards and system safety processes.
- Methods of hazard identification HAZOP, LOPA, and FMEA.
- Assessing and implementing control measures for identified hazards and risks.

#### **Section 3: Human Influences**

- Understanding the potential for human error.
- Correctly utilising digital programs and technologies to reduce human error potential.
- Effective communication in verbal and non-verbal forms in relation to awareness about risks.
- Human influence in major incidents.
- Reducing errors and violations.

#### **Section 4: Accidents and Control**

- Finding the balance between risk certainty and uncertainty.
- Types of analysis conducted to measure risk types and severity FMEA, RPN, RBD, and RCM.
- Appropriately documenting the risks and preventative measures found in place.
- Thoroughly investigating incidents if they occur to evaluate the cause and future preventative measures.
- Design and reliability of control and protective systems.

#### Section 5: Organisational Culture Surrounding Health and Safety

- Permit to work systems (PTW).
- Create open discussions about health and safety and encourage others to understand its importance.
- Implementing active monitoring of machinery or high-risk processes.
- Educating others on health and safety practices.

## **Certificate Description**

Upon successful completion of this training course, delegates will be awarded a Holistique Training Certificate of Completion. For those who attend and complete the online training course, a Holistique Training e-Certificate will be provided.

Holistique Training Certificates are accredited by the British Assessment Council (BAC) and The CPD Certification Service (CPD), and are certified under ISO 9001, ISO 21001, and ISO 29993 standards.

CPD credits for this course are granted by our Certificates and will be reflected on the Holistique Training Certificate of Completion. In accordance with the standards of The CPD Certification Service, one CPD credit is awarded per hour of course attendance. A maximum of 50 CPD credits can be claimed for any single course we currently offer.

# **Categories**

Engineering, Health, Safety & Environment HSE

## **Tags**

Health & Safety, Engineering, Healthcare, Risk management, Hazard Control

# **Related Articles**



10 Principles to Enhanced Health & Safety Management in 2025

Dive into the world of Health and Safety Management, a dynamic approach to safeguard well-being. Explore its significance across individuals, organisations, and society. Discover ten essential principles that guide effective practices, from leadership commitment to data-driven decisions.

## YouTube Video

https://www.youtube.com/embed/tOtQFyhMxuY?si=XY\_r0z\_mQnMac5DD