

Course No. 1674

Occupational Health & Industrial Hygiene Training Course

INDUSTRIAL SAFETY & HSE
INDUSTRIAL ENGINEERING, MAINTENANCE & OPERATIONS

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The Occupational Health & Industrial Hygiene Training Course provides a comprehensive and practical framework for identifying, evaluating, and controlling workplace health hazards that may affect employees, contractors, and organizational performance. The course focuses on systematic approaches to occupational health and industrial hygiene, helping organizations recognize harmful exposures before they develop into occupational illnesses or long-term health consequences.

Effective occupational health management requires a structured understanding of workplace exposure pathways and the interaction between employees, processes, materials, equipment, and working environments. The program addresses major occupational hazards, including chemical, physical, biological, ergonomic, and environmental exposures, while emphasizing practical methods for exposure assessment, monitoring, control, and continuous improvement.

The course introduces participants to the core principles of industrial hygiene, including anticipation, recognition, evaluation, and control of workplace health hazards. Participants will examine exposure assessment strategies, workplace monitoring, sampling principles, control measures, personal protective equipment, ventilation, chemical safety, noise management, thermal stress, radiation awareness, and other occupational health considerations relevant to industrial environments.

A strong focus is placed on applying the hierarchy of controls to occupational health risks and selecting appropriate engineering, administrative, and personal protective measures. Participants will also explore how occupational health programs can be integrated with HSE management systems, risk assessments, workplace inspections, emergency preparedness, contractor management, and organizational health and safety objectives.

Through practical exercises, workplace exposure scenarios, case studies, risk assessment activities, and industrial hygiene workshops, participants will develop the ability to identify occupational health hazards, assess potential exposure, evaluate existing controls, and recommend practical improvements. The Occupational Health & Industrial Hygiene Training Course supports organizations seeking to strengthen worker health protection, improve workplace conditions, reduce occupational exposure risks, and enhance overall HSE performance.

Objectives

- Analyze the fundamental principles of occupational health and industrial hygiene and their role in protecting workers.
- Identify chemical, physical, biological, ergonomic, and environmental hazards within different workplace environments.
- Apply systematic approaches for anticipating, recognizing, evaluating, and controlling occupational health hazards.
- Assess potential employee exposure to hazardous substances, noise, heat, radiation, biological agents, and other workplace hazards.
- Evaluate workplace monitoring and exposure assessment strategies based on operational conditions and risk profiles.
- Apply the hierarchy of controls to develop effective strategies for reducing occupational exposure.
- Evaluate the effectiveness of engineering controls, ventilation systems, administrative controls, and personal protective equipment.
- Develop practical approaches for chemical safety, hazardous substance management, and exposure prevention.
- Assess ergonomic and physical workplace conditions and identify opportunities for reducing occupational health risks.
- Improve occupational health inspections, monitoring programs, documentation, and corrective action processes.
- Integrate occupational health and industrial hygiene considerations into broader HSE risk management systems.
- Develop an actionable occupational health and industrial hygiene improvement plan by the end of the course.

Who Should Attend

This training course is designed for occupational health professionals, industrial hygienists, HSE managers and specialists, safety engineers, environmental health professionals, occupational physicians and nurses, workplace health coordinators, and professionals responsible for employee health and industrial safety.

The program is particularly relevant to professionals working in oil and gas, petrochemicals, energy,

manufacturing, chemicals, construction, mining, utilities, engineering, transportation, and other industrial environments where workers may be exposed to occupational health hazards. It is also suitable for government entities, ministries, public sector organizations, and large corporations responsible for workplace health and HSE management.

The course will also benefit operations managers, maintenance managers, facility managers, supervisors, project managers, laboratory professionals, and decision makers responsible for workplace conditions, employee protection, contractor safety, risk management, and regulatory compliance. Participants will gain practical approaches for integrating occupational health and industrial hygiene into daily operational and HSE management practices.

Learning Outcomes

- Explain the principles and objectives of occupational health and industrial hygiene.
- Identify major workplace health hazards and determine their potential impact on employees.
- Conduct structured assessments of chemical, physical, biological, ergonomic, and environmental hazards.
- Evaluate potential occupational exposure pathways and determine appropriate monitoring requirements.
- Apply basic principles of workplace exposure assessment and industrial hygiene monitoring.
- Evaluate the effectiveness of existing engineering, administrative, and personal protective controls.
- Apply the hierarchy of controls to develop practical occupational exposure reduction strategies.
- Assess workplace conditions related to noise, heat stress, chemical exposure, ventilation, ergonomics, and other occupational hazards.
- Develop appropriate approaches for chemical hazard communication and hazardous substance management.
- Evaluate occupational health inspection findings and translate them into corrective and preventive actions.
- Integrate industrial hygiene considerations into HSE risk assessments, workplace inspections, and management systems.
- Develop a practical occupational health and industrial hygiene improvement plan based on workplace risks and organizational priorities.

Course Outline

DAY 01

Occupational Health & Industrial Hygiene Fundamentals

- Principles, objectives, and scope of occupational health and industrial hygiene
- Anticipation, recognition, evaluation, and control of workplace health hazards
- Occupational health responsibilities within integrated HSE management systems
- Identification of exposure pathways and vulnerable worker groups

PRACTICAL APPLICATION

Analyze an industrial workplace and identify major occupational health hazards and potential exposure pathways

DAY 02

Chemical, Physical & Environmental Health Hazards

- Chemical hazards, hazardous substances, and occupational exposure
- Noise, vibration, heat stress, cold environments, and lighting
- Radiation awareness and other physical workplace hazards
- Biological hazards and workplace environmental conditions

PRACTICAL APPLICATION

Conduct an occupational health hazard assessment and determine priority exposure risks

DAY 03

Exposure Assessment, Monitoring & Industrial Hygiene Controls

- Principles of workplace exposure assessment and monitoring
- Sampling strategies and interpretation of workplace monitoring information
- Engineering controls, ventilation, isolation, and containment
- Administrative controls and personal protective equipment

DAY 03 — CONTINUED

PRACTICAL APPLICATION

Develop an exposure assessment and control strategy for a selected workplace hazard

DAY 04

Ergonomics, Occupational Health Programs & Worker Protection

- Ergonomic risk factors and workplace assessment
- Manual handling, repetitive tasks, posture, and workstation design
- Occupational health surveillance and worker health protection programs
- Chemical safety, health communication, and hazardous substance management

PRACTICAL APPLICATION

Assess an occupational health scenario and develop practical control measures for identified ergonomic and exposure risks

DAY 05

HSE Integration, Performance Monitoring & Continuous Improvement

- Integrating occupational health and industrial hygiene into HSE management systems
- Workplace inspections, audits, monitoring, and corrective action management
- Occupational health performance indicators and program effectiveness
- Continuous improvement and strengthening organizational worker health protection

FINAL WORKSHOP

Develop a comprehensive Occupational Health & Industrial Hygiene improvement plan covering priority hazards, exposure controls, monitoring activities, responsibilities, performance measures, and implementation priorities



Register or Request More Information

Course page: <https://quest-training.com/courses/occupational-health-industrial-hygiene-training-course>

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