Industrial Hygiene Training Course

Professional Development Training Course Outline

Category	Public Health	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Industrial hygiene is a critical discipline focused on anticipating, recognizing, evaluating, and controlling workplace environmental hazards that may affect worker health and safety. With increasing industrialization, globalization of manufacturing, and stricter occupational safety regulations, organizations are prioritizing occupational health, workplace safety compliance, exposure risk management, and hazard control systems to protect their workforce and ensure regulatory alignment. Industrial Hygiene Training Course provides a structured and practical approach to understanding chemical, physical, biological, and ergonomic hazards in industrial environments, equipping participants with the skills to implement effective preventive measures.

Modern industries face rising challenges such as airborne contaminants, noise exposure, chemical toxicity, heat stress, and respiratory hazards, making industrial hygiene a core component of sustainable operations. This course integrates global best practices, regulatory frameworks (such as OSHA and ISO standards), and real-world case studies to strengthen competency in risk assessment, monitoring strategies, and control technologies. Participants will gain actionable knowledge to enhance workplace risk reduction, compliance auditing, and occupational health programs across diverse industrial sectors.

Programme Curriculum

Industrial Hygiene Training Course

Introduction

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Course Duration

5 days

Course Objectives

1. Understand principles of industrial hygiene and occupational health safety (OHS)
2. Identify workplace chemical, physical, and biological hazards
3. Apply risk assessment and exposure evaluation techniques
4. Implement hierarchy of controls in hazard management
5. Conduct air sampling and environmental monitoring
6. Analyze noise exposure and hearing conservation strategies
7. Evaluate respiratory protection and PPE effectiveness
8. Develop workplace safety compliance programs
9. Apply ISO 45001 occupational health standards
10. Manage ergonomic risk factors and musculoskeletal disorders
11. Interpret toxicology and exposure limit values (TLVs)
12. Conduct incident investigation and root cause analysis
13. Improve safety culture and sustainability in industrial operations

Target Audience

1. Safety Officers and HSE Managers
2. Industrial Hygienists and Environmental Health Professionals
3. Factory and Plant Managers
4. Occupational Health Nurses and Doctors
5. Compliance and Risk Management Officers
6. Engineering and Maintenance Supervisors
7. Construction Site Safety Personnel
8. Students and Researchers in Occupational Health & Safety

Course Modules

Module 1: Introduction to Industrial Hygiene

- History and evolution of industrial hygiene
- Key principles of exposure prevention
- Regulatory frameworks (OSHA, NIOSH, ISO)
- Role of industrial hygienist in organizations
- Case Study: Chemical plant safety failure due to poor exposure monitoring

Module 2: Workplace Hazard Identification

- Types of industrial hazards (chemical, physical, biological)
- Hazard mapping techniques
- Job safety analysis (JSA)
- Workplace inspection procedures
- Case Study: Noise-induced hearing loss in manufacturing plant

Module 3: Exposure Assessment & Monitoring

- Air sampling techniques and equipment
- Noise and vibration measurement tools
- Biological exposure indices (BEIs)
- Data interpretation and reporting
- Case Study: Solvent exposure in printing industry

Module 4: Toxicology and Health Effects

- Basic industrial toxicology principles
- Dose-response relationships
- Acute vs chronic exposure effects
- Permissible exposure limits (PELs)
- Case Study: Asbestos exposure in construction workers

Module 5: Control Measures & Hierarchy of Controls

- Elimination and substitution strategies
- Engineering controls (ventilation systems)
- Administrative controls and rotation systems
- Personal protective equipment (PPE) selection
- Case Study: Dust control in cement manufacturing plant

Module 6: Respiratory Protection & PPE Management

- Types of respirators and protective gear
- Fit testing and maintenance procedures
- PPE compliance monitoring
- Limitations of protective equipment
- Case Study: Failure of PPE in chemical spill incident

Module 7: Ergonomics & Workplace Design

- Ergonomic risk identification
- Manual handling and lifting safety
- Workstation design optimization
- Prevention of musculoskeletal disorders (MSDs)
- Case Study: Repetitive strain injury in assembly line workers

Module 8: Industrial Hygiene Management Systems

- Occupational health and safety management systems
- Incident reporting and investigation
- Safety audits and inspections
- Continuous improvement strategies

- Case Study: ISO 45001 implementation in manufacturing company

Training Methodology

- Interactive classroom lectures and guided discussions
- Real-world case study analysis and problem-solving sessions
- Practical demonstrations of monitoring equipment
- Group workshops and hazard identification exercises
- Video-based learning and simulation scenarios
- Field-based practical exposure (industrial site visits where applicable)
- Pre- and post-training assessments for competency evaluation
- Role-playing exercises for incident response and reporting

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com