Industrial Hygiene and Occupational Health Compliance Training Course



21 - 25 Dec 2026

Cairo

3700 € (Per Person)

Ref: #HSE9226_276741

Course Introduction / Overview:

This comprehensive training course provides a deep dive into the critical principles and practices of industrial hygiene and occupational health. It is designed to equip professionals with the knowledge and skills necessary to anticipate, recognize, evaluate, and control workplace hazards that can lead to injury, illness, or impaired well-being. The curriculum moves beyond basic compliance, fostering a proactive approach to creating and maintaining safe and healthy work environments. As highlighted by experts like Barbara Cohrssen, a key editor of the seminal work "Patty's Industrial Hygiene," the field is a dynamic blend of science and management. This course reflects that synergy, integrating technical knowledge of chemical, physical, biological, and ergonomic stressors with strategic implementation of health and safety management systems. BIG BEN Training Center has developed this program to empower participants to not only meet regulatory standards but to champion a culture of health and safety, ultimately protecting an organization's most valuable asset, its people, while enhancing operational efficiency and corporate reputation.

Target Audience / This training course is suitable for:

- Health and Safety Managers and Officers.
- Industrial Hygienists and Technicians.
- Operations and Plant Managers.
- Human Resources Professionals involved in employee wellness.
- Facility and Maintenance Supervisors.
- Engineers and Technical Staff.
- Regulatory Compliance Specialists.
- Members of Joint Health and Safety Committees.
- Anyone aspiring to a career in occupational health and safety.

Target Sectors and Industries:

- Manufacturing and Production.
- Oil and Gas and Petrochemical Industries.
- Construction and Engineering.
- Healthcare and Pharmaceutical Sectors.
- Mining and Extraction.
- Transportation and Logistics.
- Governmental bodies and public sector agencies.
- Utilities and Energy Production.

Target Organizations Departments:

- Health, Safety, and Environment (HSE) Departments.
- Operations and Production Management.
- Human Resources and Employee Relations.
- Engineering and Maintenance.
- Risk Management and Compliance.
- Facilities Management.
- Quality Assurance and Control.
- Research and Development Laboratories.

Course Offerings:

By the end of this course, the participants will have able to:

- Develop a comprehensive industrial hygiene program framework.
- Identify and classify a wide range of workplace hazards.
- Conduct qualitative and quantitative exposure assessments.
- Select and implement appropriate hazard control measures based on the hierarchy of controls.
- Interpret occupational exposure limits and regulatory standards.
- Manage specific programs such as hearing conservation and respiratory protection.
- Contribute to the development and implementation of an OHS management system.
- Conduct effective incident investigations and root cause analysis.
- Promote a positive and proactive health and safety culture within the organization.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive, engaging, and practical, ensuring that participants can directly apply their learning to real-world scenarios. We move beyond traditional lecture-based formats by incorporating a blend of expert-led presentations, detailed case study analyses of industrial hygiene challenges, and collaborative group workshops. Participants will engage in practical exercises simulating hazard recognition, risk assessment, and control strategy development. Interactive sessions, facilitated discussions, and Q&A panels encourage the sharing of experiences and peer-to-peer learning. The course emphasizes a hands-on approach, where theoretical concepts are immediately reinforced through application. Feedback is a continuous process, with instructors providing guidance throughout the sessions to ensure a deep understanding of the material. This immersive learning environment guarantees that attendees leave not just with knowledge, but with the confidence and competence to implement effective industrial hygiene and occupational health programs in their workplaces.

Course Agenda (Course Units):

Unit One: Foundations of Industrial Hygiene and Occupational Health

- Introduction to Industrial Hygiene and Occupational Health.
- The ethical and legal framework for workplace safety.
- Key roles and responsibilities of an Industrial Hygienist.
- Understanding the Anticipate, Recognize, Evaluate, Control (AREC) paradigm.
- Global and local regulatory standards (e.g., OSHA, NIOSH).
- Introduction to toxicology and routes of exposure.
- The business case for investing in occupational health.

Unit Two: Hazard Recognition and Evaluation

- Recognizing chemical hazards (gases, vapors, dusts, fumes).
- Understanding physical hazards (noise, vibration, radiation, thermal stress).
- Identifying biological hazards (bacteria, viruses, fungi).
- Assessing ergonomic and psychosocial risk factors.
- Introduction to Safety Data Sheets (SDS) and hazard communication.
- Principles of qualitative and quantitative risk assessment.
- Walk-through survey techniques and workplace inspection.

Unit Three: Exposure Assessment and Control Strategies

- Principles of air sampling and monitoring strategies.
- Direct-reading instruments and laboratory analysis techniques.
- Understanding Occupational Exposure Limits (OELs).
- The hierarchy of controls from elimination to PPE.
- Designing effective engineering controls like ventilation.
- Implementing administrative controls and safe work practices.
- Selection, use, and maintenance of Personal Protective Equipment (PPE).

Unit Four: Managing Specific Occupational Health Programs

- Developing a comprehensive Hearing Conservation Program.
- Implementing a compliant Respiratory Protection Program.
- Managing a robust Hazard Communication Program (HazCom).
- Ergonomics program development and implementation.
- Strategies for managing thermal stress (heat and cold).
- Introduction to radiation safety principles.
- Developing and managing a chemical hygiene plan.

Unit Five: OHS Management Systems and Continuous Improvement

- Introduction to OHS Management Systems (e.g., ISO 45001).
- Conducting effective workplace safety audits and inspections.
- Techniques for incident investigation and root cause analysis.
- Health surveillance and medical monitoring programs.
- Emergency preparedness and response planning.
- Metrics for measuring and reporting on OHS performance.
- Strategies for building and sustaining a positive safety culture.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

Beyond regulatory compliance, how can proactive industrial hygiene programs be leveraged as a strategic asset to enhance organizational resilience and profitability?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by moving beyond a purely compliance-driven checklist approach to industrial hygiene and occupational health. While it thoroughly covers regulatory standards and technical assessment methods, its core focus is on strategic implementation and the cultivation of a preventative safety culture. Unlike programs that may focus narrowly on specific hazards, this training provides a holistic framework, integrating industrial hygiene into the broader context of business operations and risk management. Participants will learn not just the "what" and "how" of hazard control, but the "why" behind strategic health and safety decisions. The curriculum emphasizes critical thinking and problem-solving through complex, real-world case studies, challenging participants to develop integrated control strategies rather than isolated solutions. It bridges the gap between technical expertise and leadership, empowering attendees to become influential advocates for health and safety who can demonstrate its value in terms of productivity, employee morale, and long-term organizational sustainability.