

Introduction

This certified industrial hygiene program provides comprehensive coverage of the fundamental principles of industrial hygiene. It emphasizes anticipating, identifying, assessing, communicating, and managing workplace conditions that may lead to occupational illnesses and diseases.

The program is designed for individuals and managers seeking to develop or enhance their knowledge of industrial hygiene.

In the introductory unit, participants will explore the role of an industrial hygienist, including the requirements for certification and the responsibilities of professionals in this field.

Fundamentals of Industrial Hygiene

The course includes instruction on the foundational principles of industrial hygiene. Participants will learn about industrial hygiene tools and equipment and the importance of obtaining certification for professional growth in this discipline.

Throughout the course, participants aspiring to become certified industrial hygienists will gain a thorough understanding of the certification process and the value of training in meeting the professional requirements.

Target Audience

This industrial hygiene course is intended for all personnel involved in safety, health, and environmental management, as well as staff with industrial hygiene responsibilities. It is also suitable for personnel working in catering services and office environments.

Course Objectives

Upon completing the industrial hygiene course, participants will be able to:

- Understand and apply industrial hygiene principles.
- Perform hazard identification tasks.
- Gain in-depth knowledge of various industrial hygiene topics.
- Learn about different occupational illnesses and disease conditions.
- Anticipate, identify, assess, communicate, and manage workplace hazards effectively.

Target Competencies

By the end of the course, participants will demonstrate competency in:

- Principles of occupational hygiene programs.
- Recognizing health hazards, including biological and chemical risks.

- Fundamental sciences, such as human anatomy, biology, and the effects of chemicals.
- Identifying occupational diseases.
- Techniques for health sampling, measurement, and evaluation.

Course Content

Unit 1: Introduction to Industrial Hygiene

- Definition of industrial hygiene.
- Industrial hygiene management systems.
- Occupational exposure standards.
- Overview of various health risks.
- Occupational diseases and illness conditions.

Unit 2: Understanding Health Risks

- Human body systems, including skeletal, muscular, nervous, circulatory, respiratory, skin, and sensory systems.
- Methods for identifying health risks.
- Biological, chemical, physical, and radiation risks, including both ionizing and non-ionizing radiation.

Unit 3: Industrial Toxicology

- Routes of exposure to hazardous substances.
- Classification of hazardous substances and their health effects.
- Toxic, irritant, asphyxiant, and anesthetic agents.
- Agents affecting the liver, kidneys, nervous system, blood, and lungs.

Unit 4: Measuring and Evaluating Health Risks

- Identifying potential health risks.
- Sampling of gases, vapors, and particulates.
- Conducting walk-through surveys.
- Health surveillance programs.
- Health risk assessment and evaluation.
- Methods for controlling workplace health risks.

Unit 5: Monitoring and Recording Health Risk Controls

- Biological monitoring and medical surveillance.
- Hearing conservation programs.
- Programs for preventing occupational illnesses and diseases.
- Learning from incidents of ill health.
- Step-by-step guidance for managing workplace health risks.