Training Course on Manufacturing Safety and Health

Professional Development Training Course Outline

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

Course Introduction

Manufacturing safety and health are critical pillars of industrial success. With rising global demand and evolving technological landscapes, ensuring a safe, compliant, and efficient manufacturing environment is not only a legal obligation but also a competitive advantage. Training Course on Manufacturing Safety and Health is designed to equip professionals with the necessary skills to identify hazards, implement safety protocols, and sustain a culture of health and safety in modern manufacturing setups.

Built on globally recognized standards such as OSHA, ISO 45001, and Lean Manufacturing safety protocols, this course focuses on enhancing worker protection, reducing workplace incidents, and boosting overall productivity. Through case-based learning and real-world applications, trainees will gain both theoretical knowledge and practical tools essential for today’s dynamic manufacturing environment.

Programme Curriculum

Training Course on Manufacturing Safety and Health

Introduction

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today’s dynamic manufacturing environment.

Course Objectives

1. Understand core manufacturing health and safety regulations.
2. Identify and assess occupational hazards in manufacturing plants.
3. Implement personal protective equipment (PPE) protocols.
4. Develop emergency response and evacuation procedures.
5. Integrate machine safety and equipment guarding standards.
6. Conduct effective risk assessment and hazard analysis.
7. Apply ergonomics in industrial workstations to reduce injuries.
8. Promote a culture of behavior-based safety (BBS).
9. Analyze root causes of workplace incidents using modern tools.
10. Align with ISO 45001 occupational health and safety standards.
11. Use digital tools and IoT for safety monitoring.
12. Establish incident reporting and corrective action systems.
13. Design and manage workplace safety training programs.

Target Audience

1. Safety Officers in Manufacturing
2. Industrial Engineers and Plant Managers
3. Health & Safety Compliance Managers
4. Maintenance and Technical Staff
5. HR and Training & Development Professionals
6. Quality Assurance Inspectors
7. Lean Manufacturing and Six Sigma Practitioners
8. Production Supervisors and Floor Leaders

Course Duration: 5 days

Course Modules

Module 1: Introduction to Manufacturing Safety

- Overview of safety culture and importance
- Key terminologies in occupational safety
- Role of OSHA and ISO 45001
- Common hazards in manufacturing
- Legal consequences of non-compliance
- **Case Study: Safety Audit Failure at XYZ Manufacturing**

Module 2: Hazard Identification and Risk Assessment

- Techniques for hazard identification
- Steps in risk assessment
- Risk prioritization matrix
- Using HAZOP in manufacturing plants
- Integrating safety into job hazard analysis (JHA)
- **Case Study: Hazard Analysis in a Food Packaging Unit**

Module 3: Machinery and Equipment Safety

- Guarding mechanisms and safety devices
- Lockout/tagout (LOTO) procedures

- Preventive maintenance strategies
- Automation and robotic safety
- Equipment-related incident investigations
- **Case Study: Robotic Arm Accident in Auto Plant**

Module 4: Personal Protective Equipment (PPE)

- Selection of appropriate PPE
- PPE compliance and usage training
- PPE for chemical, noise, and fire hazards
- Maintenance and disposal of PPE
- Latest innovations in smart PPE
- **Case Study: PPE Negligence in a Paint Manufacturing Unit**

Module 5: Ergonomics in the Manufacturing Workplace

- Ergonomic hazards and musculoskeletal disorders
- Workstation design best practices
- Manual material handling guidelines
- Fatigue and repetitive motion prevention
- Ergonomic risk assessment tools
- **Case Study: Ergonomic Injury Reduction in Electronics Assembly Line**

Module 6: Fire Safety and Emergency Preparedness

- Fire hazard identification in plants
- Evacuation drills and emergency exits
- Fire extinguisher training and types
- Alarm systems and fire suppression tech
- Emergency response team roles
- **Case Study: Fire Incident Response at a Textile Factory**

Module 7: Safety Communication and Incident Reporting

- Creating an open safety communication culture
- Near-miss and incident reporting systems
- Investigation methods (5 Whys, Fishbone)
- Real-time reporting tools and apps
- Communicating safety metrics to stakeholders
- **Case Study: Root Cause Analysis of Slip and Fall in Packaging Dept.**

Module 8: Health and Safety Program Implementation

- Designing workplace safety policies
- Training program creation and execution
- Compliance audits and continuous improvement
- Safety performance KPIs
- Budgeting for health and safety initiatives
- **Case Study: Long-term Safety Culture Change in Heavy Equipment Plant**

Training Methodology

- Interactive instructor-led sessions
- Real-world case study discussions
- Hands-on simulations and safety drills
- Group activities and role-playing scenarios

- E-learning modules and video demonstrations
- Pre-assessment and post-assessment evaluations

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

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

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