Waste Management & Public Health 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

Waste management and public health are deeply interconnected pillars of sustainable urban development, environmental safety, and community well-being. With rapid urbanization, climate change, and population growth, cities are facing escalating challenges in solid waste disposal, biomedical waste handling, sanitation systems, and pollution control. Poor waste management practices contribute directly to the spread of infectious diseases, contamination of water sources, air pollution, and long-term ecological degradation. Waste Management & Public Health Training Course is designed to build advanced competencies in integrated waste management systems, circular economy practices, and public health risk mitigation strategies.

This program emphasizes modern, data-driven, and technology-enabled approaches such as smart waste tracking systems, zero-waste cities, landfill diversion techniques, and sustainable sanitation infrastructure. Participants will gain practical insights into policy frameworks, environmental compliance, community hygiene promotion, and health risk assessment linked to improper waste disposal. The course bridges environmental engineering, public health science, and sustainability management to prepare professionals capable of addressing global waste crises and safeguarding population health.

Programme Curriculum

Waste Management & Public Health Training Course

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Course Duration

5 days

Course Objectives

1. Understand integrated solid waste management systems (SWMS) and global best practices
2. Apply principles of circular economy and zero-waste strategies
3. Analyze public health risks linked to biomedical and hazardous waste
4. Implement smart waste management technologies and IoT-based tracking systems
5. Develop sustainable urban sanitation and hygiene infrastructure plans
6. Evaluate environmental impact using life cycle assessment (LCA) tools
7. Strengthen knowledge of waste segregation, recycling, and resource recovery
8. Design community-based public health and sanitation awareness programs
9. Assess regulatory frameworks for environmental compliance and waste laws
10. Mitigate disease outbreaks through sanitation and hygiene interventions (WASH)
11. Promote plastic waste reduction and sustainable alternatives
12. Integrate climate resilience into waste and environmental health systems
13. Build capacity for data-driven environmental health decision-making

Target Audience

1. Environmental health officers
2. Public health professionals and epidemiologists
3. Municipal waste management authorities
4. Urban planners and infrastructure developers
5. NGO and sustainability practitioners
6. Healthcare facility administrators
7. Environmental engineering students and researchers
8. Government policy makers and regulators

Course Modules

Module 1: Foundations of Waste Management Systems

- Types of waste: municipal, industrial, biomedical
- Waste lifecycle and material flow analysis
- Collection, transportation, and disposal systems
- Environmental pollution pathways
- **Case Study:** Urban waste crisis and landfill overflow in rapidly growing cities

Module 2: Public Health and Environmental Linkages

- Waste-related disease transmission pathways
- Water, soil, and air contamination impacts
- Vector-borne disease outbreaks
- Hygiene and sanitation interdependence
- **Case Study:** Cholera outbreak linked to improper waste disposal systems

Module 3: Circular Economy & Zero-Waste Models

- Principles of circular economy
- Waste-to-energy technologies
- Recycling and upcycling innovations
- Extended producer responsibility (EPR)
- **Case Study:** Zero-waste city initiatives in European municipalities

Module 4: Smart Waste Management Technologies

- IoT-enabled waste monitoring systems
- AI-based route optimization for collection
- Smart bins and sensor technologies
- Data analytics for waste forecasting
- **Case Study:** Smart city waste management system implementation

Module 5: Biomedical & Hazardous Waste Management

- Hospital waste segregation protocols
- Incineration and sterilization techniques
- Chemical and radioactive waste handling
- Occupational safety measures
- **Case Study:** Hospital infection control failure due to poor waste handling

Module 6: Sanitation, Hygiene & WASH Systems

- Water, sanitation, and hygiene (WASH) frameworks
- Community-led total sanitation (CLTS)
- School and urban hygiene programs
- Disease prevention through sanitation infrastructure
- **Case Study:** Rural sanitation improvement and reduction in diarrheal diseases

Module 7: Environmental Policies & Legal Compliance

- International environmental regulations
- National waste management policies
- Environmental impact assessment (EIA)
- Enforcement and compliance mechanisms
- **Case Study:** Policy enforcement failure leading to illegal dumping sites

Module 8: Sustainable Urban Planning & Climate Resilience

- Integration of waste systems in urban planning
- Climate-smart infrastructure design

- Disaster waste management strategies
- Green infrastructure development
- **Case Study:** Post-disaster waste management after major flooding events

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

Start Date	End Date	Location	Price
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

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