Sustainable Food Manufacturing Training Course

Professional Development Training Course Outline

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

Course Introduction

Sustainable Food Manufacturing is rapidly transforming the global food industry as companies shift toward climate-smart production, circular economy practices, ESG compliance, and green supply chains. Sustainable Food Manufacturing Training Course is designed to equip professionals with cutting-edge knowledge in sustainable food processing, energy-efficient manufacturing, waste reduction strategies, carbon footprint management, and eco-friendly packaging systems. It integrates modern industry standards such as ISO 14001 Environmental Management Systems, HACCP sustainability integration, and net-zero food production strategies.

With rising consumer demand for organic, traceable, ethical, and low-carbon food products, manufacturers must adapt to sustainable operations to remain competitive. This course provides practical, hands-on learning in green manufacturing technologies, sustainable sourcing, regenerative agriculture linkages, and smart factory automation for food production. Participants will gain the skills needed to lead sustainability transformation across food production value chains while meeting global regulatory and ESG reporting requirements.

Programme Curriculum

Sustainable Food Manufacturing Training Course

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Course Objectives

1. Understand principles of sustainable food manufacturing and green production systems
2. Apply circular economy models in food processing industries
3. Implement carbon footprint reduction strategies in manufacturing plants
4. Develop expertise in zero-waste food production systems
5. Master energy efficiency optimization in food factories
6. Integrate ESG compliance and sustainability reporting frameworks
7. Design eco-friendly packaging and biodegradable materials solutions
8. Improve water conservation and wastewater recycling in food plants
9. Apply smart manufacturing and Industry 4.0 sustainability tools
10. Enhance ethical sourcing and sustainable supply chain management
11. Implement food safety with sustainability integration
12. Develop climate-resilient food production strategies
13. Lead green transformation projects in food manufacturing organizations

Target Audience

1. Food manufacturing plant managers
2. Quality assurance and food safety officers
3. Sustainability and ESG managers
4. Supply chain and procurement professionals
5. Food engineers and process engineers
6. Agribusiness entrepreneurs and investors
7. Government food regulatory officers
8. Environmental health and safety professionals

Course Modules

Module 1: Introduction to Sustainable Food Manufacturing

- Fundamentals of sustainability in food production
- Global trends in green manufacturing
- Environmental impact of food processing
- Sustainability KPIs in food industries
- Transitioning from linear to circular systems
- **Case Study:** Nestlé’s global sustainability transformation in reducing production emissions

Module 2: Circular Economy in Food Processing

- Principles of circular economy in food systems
- Waste valorization techniques
- By-product utilization strategies
- Industrial symbiosis models
- Closed-loop production systems
- **Case Study:** Unilever’s circular packaging and waste reuse initiatives

Module 3: Energy Efficiency & Carbon Reduction

- Energy auditing in food plants
- Renewable energy integration
- Carbon accounting and monitoring tools
- Process optimization for energy savings
- Net-zero manufacturing pathways
- **Case Study:** Danone’s carbon-neutral dairy processing facilities

Module 4: Sustainable Supply Chain Management

- Ethical sourcing frameworks
- Supplier ESG assessment tools
- Green logistics and distribution
- Traceability and transparency systems
- Risk management in supply chains
- **Case Study:** Starbucks ethical coffee sourcing program

Module 5: Waste Management & Water Conservation

- Food waste reduction strategies
- Water reuse and recycling systems
- Waste-to-energy technologies
- Zero liquid discharge systems
- Sustainable effluent treatment
- **Case Study:** PepsiCo water replenishment initiatives

Module 6: Sustainable Packaging & Materials

- Biodegradable and compostable packaging
- Plastic reduction strategies
- Life cycle assessment (LCA) of packaging
- Eco-design principles
- Regulatory compliance in packaging
- **Case Study:** Coca-Cola PlantBottle sustainable packaging innovation

Module 7: Smart Manufacturing & Industry 4.0

- IoT in sustainable food production
- AI-driven process optimization
- Predictive maintenance for energy savings
- Digital twins in manufacturing
- Smart sensors for resource efficiency
- **Case Study:** Siemens smart food factory automation model

Module 8: ESG Compliance & Sustainability Reporting

- ESG frameworks in food industry
- Sustainability auditing techniques
- Global reporting standards
- Stakeholder engagement strategies
- Climate risk disclosure
- **Case Study:** McDonald's ESG reporting and sustainability roadmap

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

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

Register Online Now

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