

Central International University-CIU Diversity Learning Institute-DLI Twikatane e.V Germany

Skills Curriculum/Syllabus

Course Duration: 3 to 6 months

Course: Garbage Recycling & Waste Management

Course Objects

- 1. Understanding Waste Management: To develop a comprehensive understanding of waste management principles, including waste generation, collection, disposal, and recycling processes.
- 2. Waste Classification and Segregation: To learn about different types of waste and the importance of proper waste classification and segregation to facilitate effective waste management practices.
- 3. Environmental Impacts: To understand the environmental consequences of improper waste disposal, including pollution, resource depletion, habitat destruction, and climate change, and to explore sustainable waste management solutions.

- 4. Waste Reduction Strategies: To explore strategies for waste reduction at the source, including promoting waste minimization, reuse, and repair initiatives to decrease the overall waste generation.
- 5. Recycling and Resource Recovery: To gain knowledge of recycling processes and techniques, including material recovery, composting, and energy generation from waste, to maximize resource utilization and minimize waste sent to landfills.
- 6. Waste Collection and Transportation: To learn efficient waste collection and transportation methods, including the use of appropriate containers, waste collection vehicles, and optimized collection routes.
- 7. Waste Treatment Technologies: To understand different waste treatment technologies, such as incineration, anaerobic digestion, and landfill management, and their suitability in specific waste management contexts.
- 8. Hazardous and Special Waste Management: To recognize the unique challenges associated with hazardous and special waste, including proper handling, storage, and disposal practices to ensure public and environmental safety.
- 9. Community Engagement: To encourage community participation and awareness in waste management initiatives, promoting behavior change, and responsible waste disposal practices.
- 10. Policy and Regulation: To familiarize oneself with waste management policies, regulations, and best practices at local, national, and international levels, and to understand the role of governance in effective waste management.
- 11. Technological Advancements: To explore emerging technologies and innovations in waste management, including smart waste management systems, data analytics, and waste-to-energy technologies.
- 12. Social and Economic Impacts: To understand the social and economic implications of waste management, including job creation, economic opportunities, and the importance of waste management in creating sustainable and livable communities.

By pursuing these objectives, the course on Garbage Recycling & Waste Management aims to equip individuals with the knowledge and skills necessary to implement effective waste management practices, reduce environmental impacts, promote resource conservation, and contribute to the development of sustainable waste management systems.

(A) Composition of The Syllabus

- Module 1: Introduction to Waste Management
- Module 2: Types of Waste and their Characteristics
- Module 3: Waste Collection and Segregation
- Module 4: Recycling Techniques and Processes
- Module 5: Composting and Organic Waste Management
- Module 6: Hazardous Waste Management
- Module 7: Waste-to-Energy Conversion
- Module 8: Waste Management Policies and Regulations
- Module 9: Community Engagement and Awareness