Curriculum and Syllabi

PG Diploma in Waste Management and Environmental Hygiene (PGDWMEH) (2021)

Need & Objective of the Programme:

Need

Collection and disposal of solid waste has become a burning issue for people as well as the local bodies all over India from villages to cities. Polluted and stinking water bodies, leaking drainages are common scene these days almost everywhere. Only a small quantity of solid waste is collected and a miniscule of it is properly segregated and reused. Thus waste are either seen littered along streets or end up in landfills, creating lot of health issues for the people in the society. One of the reasons for not recovering wealth from waste is non-availability of people trained in managing wastes. On the other side is the lack of job opportunity for the expanding youth population of developing India. Our beloved AMMA has taken up the issue of waste long back and has been cleaning streets of India through *Amala Bharatham* Programme for more than 10 years now. Of recent times Prime Minister of India has initiated a clean India movement with the flagship *Swachh bharath* Programme. Thus the present programme, PG Diploma in Waste Management and Environmental Hygiene, is in synchronization with the programme of AMMA and the Swachh bharath.

Programme Objectives:

- 1. To provide fundamental knowledge
- 2. Impart training in analysis of problems and finding out solutions
- 3. Educate about environmental sustainability
- 4. Inculcate ethical thinking
- 5. Train to manage projects
- 6. To help in life-long learning
- 7. To provide training on the usage of modern tools

Programme Educational Objectives (PEOs)

PEO1: To produce professionally qualified man power to handle solid waste

PEO2: To improve the scientific management of solid waste so as to create hygienic and sustainable environment

PEO3:To meet the demand for skilled man power in solid waste management industry, manufacturing industry for satisfying itsExtended Producer Responsibility (EPR), and Producer Responsibility Organisation (PRO)

Programme Specific Objectives:

- 1. To enhance the knowledge on the scientific management of the waste for a sustainable future and promote environmental hygiene
- 2. To create man power to fill the lacunae of professionals in waste management sector
- 3. To create entrepreneurs and increase job opportunity for younger generation in waste management sector

Programme Outcomes (POs)

The general Programme Outcomes (POs) include the following:

PO1: Gaining fundamental knowledge in science

PO2: Ability to analyse problems and find out solutions

PO3: Awareness in environmental sustainability

PO4: Ethical thinking

PO5: Skills to manage projects

PO6: Life-long learning

PO7: Skills to use modern tools

Programme Specific Outcomes (PSOs)

The Programme Specific Outcomes (PSOs) are listed below:

- **PSO1:**Knowledge on waste management for sustainable future and environmental hygiene
- **PSO2:**Skills to meet the professional man power demands of the waste management sector
- **PSO3:**Encourageentrepreneurs in waste management, thereby creating employment opportunity in waste management sector

Opportunities for the students who pass out this Programme

Sanitation Dept., Public Health Dept., Water Supply and Drainage Board, CSR Programme, Waste Management Units/Industries, Hospital, Water Treat Plants, Public Health Specialist in State and Central Government Departments; Waste Management specialist in Airports, Hotels, Hospitals; Sanitary Officer in Municipal Corporation and Urban Local Bodies, NGOs working in Sanitation and Public Health, Food Industry Authorised Recycling Agencies, PRO organizations, Startups in Waste Management.

Curriculum

SEMESTER I

Course	Course Title	L-T-P	Credits
Code			
21WME501	Overview of Waste Management	400	4
21WME502	Handling and disposal of major types of wastes	400	4
21WME503	Water and Soil Resource Management	400	4
21WME504	Legal Aspects and Mandatory Regulations	400	4
21WME581	Water pollution	004	2
21WME582	Waste Management - Field Visit I	004	2
21ENG112	Professional Communication	200	2
	Total		22

SEMESTER II

Course	Course Title	L-T-P	Credits
Code			
21WME511	Community Mobilization towards Sustainable	300	3
	Development		
21WME512	Waste Management as Project Management	300	3
21WME513	Entrepreneurship in Waste Management	300	3
21WME514	Occupational Health and Safety, Environmental	400	4
	Cost and Risks		
21WME515	GIS and RS in Waste Management	300	3
21WME583	Analysis of constituents in Soil and Air	004	2
21WME584	Waste Management - Field Visit II	004	2
21WME591	Internship		Pass/Fail
	Total		20