# CERTIFICATE COURSE IN SOLID WASTE MANAGEMENT (CCSWM)



### **Effective from Academic Year (2020-2021)**

## Shri Govind Guru University

## Godhra

### Course Title: Certificate Course in Solid Waste Management (CCSWM)

### **\*** Objective:

Solid waste management is a pressing issue, and lack of know how in solid waste management is a great concern for all the Local Self Govt. units & community. Additionally, there is still little awareness on the importance of sound environmental management within the majority of the population. The course on Solid Waste Management gives the student an overview of municipal solid waste management including collection, transfer, transport, and disposal. Methods of processing, basic disposal facilities, disposal options, and the environmental issues of solid waste management will be covered in this course.

### Duration:

Total duration of the CSWM Course shall be of six months.

**Course Tenure**: June to November & December to May.

### \* Admission Criteria:

10+2 or any equivalent examination passed. (In equivalent courses, 10+2 or more than two years ITI / Diploma course completion)

### **\*** Documents Require:

- School Leaving Certificate
- Mark sheet of SSC and HSC Board/ITI/Diploma Examination
- 2 Passport size photos
- Caste Certificate (If applicable)
- \* Medium of Instruction: English
- \* Maximum Intake: 20

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### **Course Content**

Units	Content	Credits	No. of Hours
Unit - I	Sources and Composition of Municipal Solid	01	15
	Waste		
Unit – II	Solid Waste Generation and Collection	01	15
Unit - III	Processing and disposal of Solid Waste	01	15
Unit - IV	Hazardous Solid Waste Field visit	01	15
	TOTAL	04	60

### **CERTIFICATE COURSE IN**

### SOLID WASTE MANAGEMENT (CCSWM)

### Unit – I Sources and Composition of Municipal Solid Waste

Introduction, Sources of solid waste, Types of solid waste, Composition of solid waste and its determination.

Physical properties of Municipal Solid Waste, Chemical properties of Municipal Solid Waste, Biological properties of Municipal Solid Waste, Transformation of Municipal Solid Waste.

### **Unit – II Solid Waste Generation and Collection**

Quantities of Solid Waste, Measurements and methods to measure solid waste quantities, Solid waste generation and collection, Factors affecting solid waste generation rate

#### Unit - III Processing and disposal of Solid Waste

Processing of solid waste at residence e.g. Storage, conveying, compacting, Shredding, pulping, granulating etc., Processing of solid waste at Commercial and industrial site

Combustion and energy recovery of municipal solid waste, landfill processes, Differentiate sanitary land fill and incineration as final disposal system for solid waste

#### **Unit – IV Hazardous Solid Waste**

Definition, identification and classification of hazardous solid waste, Characteristics Hazardous waste toxicity, reactivity, infectiousness, flammability, radioactivity, corrosiveness. Bio-medical waste, its sources, generation, storage and Disposal

Field visit