Course: Integrated Waste Management for a Smart City

Course Code: noc19-ce31

Session: 2019-20

Duration: 12 Weeks

Assessment procedures: Weekly Assignment (25%) + proctored certification Exam (75%)

Curriculum of the Course:

Week 1:

- Lecture 1 : Introduction
- Lecture 2 : Introduction (Contd.)
- Lecture 3 : Introduction (Contd.)
- Lecture 4 : Introduction (Contd.)
- Lecture 5 : Introduction (Contd.)

Week 2:

- Lecture 6 : Introduction (Contd.)
- Lecture 7 : Municipal Solid Waste Characteristics and Quantities
- Lecture 8 : Municipal Solid Waste Characteristics and Quantities (Contd.)
- Lecture 9 : Municipal Solid Waste Characteristics and Quantities (Contd.)
- Lecture 10 : Municipal Solid Waste Characteristics and Quantities (Contd.)

Week 3:

- Lecture 11 : MSW Characteristics - Thermal Properties and Chemical Composition
- Lecture 12 : Chemical Analysis Procedure
- Lecture 13 : Chemical Analysis Procedure (Contd.)
- Lecture 14 : Working with Data and Statistical Methods
- Lecture 15 : Waste Management Rules 2016

Week 4:

- Lecture 16 : Waste Management Rules 2016 (Contd.)
- Lecture 17 : Swachh Bharat Mission and Smart Cities Program Overview
- Lecture 18 : Storage of Solid Waste
- Lecture 19 : MSW Collection System
- Lecture 20 : MSW Collection System (Contd.)

Week 5:

- Lecture 21 : Waste Collection and Transport
- Lecture 22 : Waste Collection and Transport (Contd.)
- Lecture 23 : Waste Collection and Transport (Contd.)
- Lecture 24 : Waste Collection and Transport (Contd.)
- Lecture 25 : Waste Collection and Transport (Contd.)

Week 6:

- Lecture 26 : Collection System
- Lecture 27 : Collection System (Contd.)
- Lecture 28 : Review of MSW Management in Proposed Smart Cities
- Lecture 29 : Biological Treatment of Waste
- Lecture 30 : Biological Treatment of Waste (Contd.)

Week 7:

- Lecture 31 : Biological Treatment of Waste (Contd.)
- Lecture 32 : Biological Treatment of Waste (Contd.)
- Lecture 33 : Biological Treatment of Waste (Contd.)
- Lecture 34 : Thermal Treatment
- Lecture 35 : Thermal Treatment (Contd.)

Week 8:

- Lecture 36 : Thermal Treatment (Contd.)
- Lecture 37 : Thermal Treatment (Contd.)
- Lecture 38 : Thermal Treatment (Contd.)
- Lecture 39 : Thermal Treatment (Contd.)
- Lecture 40 : Landfill Disposal

Week 9:

- Lecture 41 : Landfill Disposal (Contd.)
- Lecture 42 : Landfill Disposal (Contd.)
- Lecture 43 : Landfill Disposal (Contd.)
- Lecture 44 : Landfill Disposal (Contd.)
- Lecture 45 : Landfill Disposal (Contd.)

Week 10:

- Lecture 46 : Landfill Disposal (Contd.)
- Lecture 47 : Landfill Disposal (Contd.)
- Lecture 48 : Construction and Demolition Waste Management
- Lecture 49 : Construction and Demolition Waste Management (Contd.)
- Lecture 50 : Construction and Demolition Waste Management (Contd.)

Week 11:

- Lecture 51: Construction and Demolition Waste Management (Contd.)
- Lecture 52: Construction and Demolition Waste Management (Contd.)
- Lecture 53: E-Waste Management
- Lecture 54: E-Waste Management (Contd.)
- Lecture 55: E-Waste Management (Contd.)

Week 12:

- Lecture 56 : E-Waste Management (Contd.)
- Lecture 57 : E-Waste Management (Contd.)
- Lecture 58 : E-Waste Management (Contd.)
- Lecture 59 : E-Waste Management (Contd.)
- Lecture 60 : E-Waste Management (Contd.)
- Lecture 61 : Tutorial - I
- Lecture 62 : Tutorial - II

Enrolled students

1	Abhishek Damachya
2	Akash Kumar Jorwal
3	Diwakar Singh
4	Bhuvan Jangid
5	Nikhil Gupta
6	Mohit Dhatterwal
7	Vatsal Agarwal