

**Course Name:**  
Solid Waste Management

**Course Number:**  
20668

**Credit:**  
3

**Course Content (outline):**

- Introduction
  - Comprehensive approach to municipal waste, the status of municipal solid waste management in the country and in Tehran
- Quality of the wastes
  - Amount, source, type, composition and characteristics of wastes, physical, chemical and biological properties of wastes, hazardous waste in municipal solid waste
- Separation, conversion and recycling
  - Source separation, collection and transportation of wastes. Solid waste conversion and recycling
- Landfilling
  - Solid waste disposal methods, composition and properties of leachate and gas, their production, movement and control, Design and monitoring of pollutants
- Comprehensive management
  - Economics, planning and management of solid waste
- Special wastes
  - Dimensions of engineering and management of solid waste from municipal wastewater treatment, sludge dissemination and its application in agriculture and land restoration.

**References:**

- “Integrated Solid Waste Management Engineering Principles and Management Issues”, Tchobanoglous et al., McGraw-Hill Book Co., 1993.
- <http://ewrc.sharif.edu/course/MSW>