

**CE763a: Solid and Hazardous Waste Management****3-0-0-0 [5], modular****Course Contents:**

Municipal Solid Waste (MSW) and Hazardous Wastes (HW) –Introduction and Definitions; Impacts of Unscientific Disposal of MSW and HW; Municipal Solid Wastes (MSW) – Estimation of Quantity and Characteristics; Reduction of Generation at Source, Source Segregation, Collection, Transfer and Transport; MSW Processing – Segregation during Processing, Reduction and Conversion for Reuse/Recycle using Physical, Chemical and Biological methods; Current Status of MSW Management in India; MSW Management Rules; Private Participation in MSW Management; Hazardous Waste (HW) – Characterization of HW; Generation; Handling of Hazardous Wastes - the “Cradle to Grave” Concept; Transport of Hazardous Waste; Incineration for Ultimate Disposal of MSW and HW – Incineration; Fundamentals; Types of Incinerators; Environmental Concerns; MSW Landfills and HW Landfills – Planning, siting and permits; Landfill processes, design, operation, post-closure care and use, and mining; Financing and Contracting of MSW and HW Processing Facilities, Public or Private Ownership and Operation, Public-Private Partnership