

Course Title: Solid and Hazardous Waste Management			
Course code: UES 301	No. of credits: 4	L-T-P: 48-12-0	Learning hours: 60
Pre-requisite course code and title (if any): No			
Department: Natural and Applied Sciences			
Course coordinator:		Course instructor:	
Contact details:			
Course type: Major		Course offered in: Semester 5	
Course Description This course provides a comprehensive understanding of solid waste management, covering waste generation, characterization, collection, treatment, disposal, and resource recovery. Students will explore municipal solid waste, hazardous waste, construction & demolition waste and e-waste, environmental and health implications of solid waste, regulatory frameworks, and technological advancements in waste treatment. The course emphasizes sustainable solid and hazardous waste management strategies, including waste minimization, circular economy approaches, and greenhouse gas mitigation techniques.			
Course objectives The course aims to develop students' understanding of: <ul style="list-style-type: none">the sources, types, and composition of solid waste, along with global and local waste generation trendswaste collection, sampling, and characterization methods, including associated health and environmental riskswaste minimization strategies and resource recovery techniques for sustainable waste managementhazardous waste management and solid waste treatment and disposal technologies including landfill designthe interconnections between waste management and greenhouse gas emissionse-waste management strategies, and innovations in e-waste recycling			