

Course code: Course Title	Course Structure			Pre-Requisite
EN106: Air Pollution and Waste Management	L	T	P	NIL
	1	0	2	

Course Objective: This course will provide B. Tech. (Environmental Engineering) students with basic hands-on experience in various aspects of Air and Noise Pollution, Solid Waste Management, and GIS and Remote Sensing allowing them to apply theoretical knowledge, develop practical skills, and gain a deeper understanding of real-world environmental challenges.

S. No	Course Outcomes (CO)
CO1	Demonstrate measurement of air quality parameters.
CO2	Demonstrate the operations for sampling and testing solid waste.
CO3	Demonstrate skills for GIS based assessments.

S. No	Contents
UNIT 1	Air Pollution Monitoring Lab.: Measurement of ambient air pollutants using appropriate monitoring equipment.
UNIT 2	Noise Pollution Monitoring Lab.: Sound Pressure Level Measurements.
UNIT 3	Solid Waste Management Lab.: Characterization of solid waste samples to determine composition and moisture content, calorific value.
UNIT 4	System Simulation & GIS Lab.: Basics of environmental modelling and systems thinking, Analysing, and visualizing environmental data using GIS softwares.

REFERENCES

S.No.	Name of Books/Authors/Publishers	Year of Publication / Reprint

1	IS 5182: Methods for Measurement of Air Pollution, various parts.	1999
2	IS 9234: Methods of Sampling and Test for Solid Waste, various parts.	1979
3	Integrated Environmental Modelling; A. Ramaswami, J. B. Milford, M. J. Small, Wiley.	2005
4	Principles of Geographical Information Systems for Land Resource Assessment; P. A. Burrough, Oxford University Press.	1986
5	Geographical Information Systems: Principles, Techniques, Management and Applications; P. A. Longley, M. F. Goodchild, D. J. Maguire, D. W. Rhind, Wiley.	2005