

Course Code	Course Title	L	T	P	C
20SE024	EIA FOR BUILDING TECHNOLOGY	3	0	0	3

PRE-REQUISITE COURSES: Environmental Engineering

COURSE OBJECTIVES:

To identify and predict the impact of a proposed project on bio geo physico chemical environment and on human health so as to recommend appropriate legislative measures, programs, and operational procedures to minimize the impact and to ensures that the potential problems are foreseen and addressed at an early stage in the project planning and design.

COURSE OUTCOMES:

At the end of the course student will be able to

CO's	Course Outcomes	PO's
1	To understand the facts, classification, grouping, significance and criteria to determine the significance and methods of impact	1
2	To predict and analyze the impacts of development projects on air and water quality, their effects and come up with conceptual approach to address	1
3	To predict and analyze the impacts of development projects on Noise, Soil, Biological and Socio-economic , their effects and conceptual approach to address impacts on Noise, Soil, Biological	1
4	To analyze the impacts come up with environmental management plan for selected industrial and commercial operations	1,2

SKILLS:

- ✓ Ability to Prepare the EIA Report
- ✓ Ability to Prepare the EMP Report
- ✓ Ability to handle the Environmental Audit

UNIT –I:

INTRODUCTION: The Need for EIA, Indian Policies Requiring EIA, The EIA Cycle and Procedures, Screening, Scoping, Baseline Data, Impact Prediction, Assessment of Alternatives, Delineation of Mitigation Measure and EIA Report, Public Hearing, Decision Making, Monitoring the Clearance Conditions, Components of EIA, Roles in the EIA Process. Government of India Ministry of Environment and Forest Notification (2000), List of projects requiring.

UNIT –II:

Environmental clearance, Application form, Composition of Expert Committee, Ecological sensitive places, International agreements. Identifying the Key Issues: Key Elements of an Initial Project Description and Scoping, Project Location(s), Land Use Impacts, Consideration of Alternatives, Process selection: Construction Phase, Input Requirements, Wastes and Emissions, Air Emissions, Liquid Effluents, Solid Wastes, Risks to Environment and Human, Health, Socio-Economic Impacts, Ecological Impacts.

UNIT –III:

Global Environmental Issues, EIA Methodologies: Criteria for the selection of EIA methodology, impact identification, impact measurement, impact interpretation & Evaluation, impact communication, Methods-Adhoc methods, Checklists methods, Matrices methods, Networks methods, Overlays methods.

UNIT –IV:

Introduction: The Need for EIA, Indian Policies Requiring EIA, The EIA Cycle and Procedures, Screening, Scoping, Baseline Data, Impact Prediction, Assessment of Alternatives, Delineation of Mitigation Measure and EIA Report, Public Hearing, Decision Making, Monitoring the Clearance Conditions, Components of EIA, Roles in the EIA Process. Government of India Ministry of Environment and Forest Notification (2000), List of projects requiring Environmental clearance, Application form, Composition of Expert Committee, Ecological sensitive places, International agreements.

UNIT –V:

Identifying the Key Issues: Key Elements of an Initial Project Description and Scoping, Project Location(s), Land Use Impacts, Consideration of Alternatives, Process selection: Construction Phase, Input Requirements, Wastes and Emissions, Air Emissions, Liquid Effluents, Solid Wastes, Risks to Environment and Human, Health, Socio-Economic Impacts, Ecological Impacts,

REFERENCES:

1. Anjaneyulu.Y., and Manickam. V., Environmental Impact Assessment Methodologies, B.S. Publications, Hyderabad, 2007.
2. 2.Canter, L.W., Environmental Impact Assessment, McGraw Hill Pub. Co., 1997.2.
3. David P. Lawrence, Environmental Impact Assessment: Practical Solutions to Recurrent
4. Problems, John Wiley & Sons, 2003.
5. Hosetti, B. B., Kumar Eds, A., Environmental Impact Assessment and Management, Daya, Publishing House, 1998