

Year & Sem	Course Code: CE4501	Course Name: <b>Environmental Impact Assessment</b>	No. of Credits: 4	L	T&PS	P
				2	2	0

  

**UNIT – I: Basic concept of EIA**  
Definition, Initial environmental Examination, Elements of EIA, - factors affecting E-I-A Impact evaluation and analysis, preparation of Environmental Base map, Classification of environmental parameters.

**UNIT – II: E I A Methodologies:**  
Introduction, Criteria for the selection of EIA Methodology, E I A methods, Ad-hoc methods, matrix methods, Network method, Environmental Media Quality Index method, overlay methods, cost/benefit Analysis.

**UNIT – III: E I A in soil, surface water, Air and Biological environment**  
Introduction and Methodology for the assessment of soil and ground water, Procurement of relevant soil quality, Impact prediction, Assessment of Impact significance, Identification and incorporation of mitigation measures  
Methodology for the assessment of Impacts on surface water environment, Air pollution sources, generalized approach for assessment of Air pollution Impact.  
Assessment of Impact of development Activities on Vegetation and wildlife, environmental Impact of Deforestation – Causes and effects of deforestation.

**UNIT – IV: Environmental Audit & Environmental legislation**  
Objectives of Environmental Audit, Types of environmental Audit, Audit protocol, stages of Environmental Audit, onsite activities, evaluation of Audit data and preparation of Audit report.

**UNIT-V: Environmental Acts and Rules**  
The Environmental Protection Act, The water Act, The Air (Prevention & Control of pollution Act.), Wild life Act, Water Cess Act, The Public Liability Insurance Act ,Environmental Protection Rules, The Hazardous Wastes (Management and Handling) Rules, EIA Notification, Public Interest Litigations.

**UNIT-VI: Case Studies**  
Case studies and preparation of Environmental Impact assessment statement for various Industries

**References/Text Books:**

1. Environmental Impact Assessment Methodologies, by Y. Anjaneyulu, B.S. Publication, Sultan Bazar, KAKINADA.
2. Environmental Science and Engineering, by J. Glynn and Gary W. Hein Ke – Prentice Hall Publishers
3. Environmental Science and Engineering, by Suresh K. Dhaneja – S.K., Katania& Sons Publication., New Delhi.
4. Environmental Pollution and Control, by Dr H.S. Bhatia – Galgotia Publication (P) Ltd, Delhi

**Lecture Plan:** Unit-I & -II syllabus for MID-I, Unit-III & -IV syllabus for MID-II and Unit-V & -VI syllabus for MID-III examinations.