

Course Code ESE 819	Credit Hours (Th-Pr) 3-0	<b>Environment Impact Assessment (Elective)</b>	Contact Hrs/Week (Th-Pr) 3.0-0	Total Contact Hrs (Th-Pr) 45-0
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**Course Outline:**

Understanding the process of EIA, to ensure the efficient utilization of resources and avoid serious and irreversible damage to the environment.

**Eligibility Criteria:** B.E (Chemical, Mechanical, Electrical, Environmental and Materials)

**Recommended Books:**

S. No.	Title	Author(s)	Assigned Code	Remarks
1.	Environment Impact Assessment	Wood, Longman	WL	Text
2.	Public Involvement in environment Assessment: Requirements, Opportunities, and Issues.	World Bank Report	WB	Reference
3.	Environmental Impact Assessment	Ed. Vanclay, F & Bronstein	EF	Reference
4.	Sectoral Guidelines of Environmental Impact Assessment.	Ministry of Environment, Govt of Pakistan	ME	Reference

**Course Objectives:**

Understanding the process of EIA, to ensure the efficient utilization of resources and avoid serious and irreversible damage to the environment.

**Learning outcome:**

Familiarity with available methods of conducting environmental impacts for development projects.

**Topics Covered:**

No.	Topics	Text	Contact
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		Book	Hours
1.	<b>Introduction</b> An overview of environmental impact assessment; selection of scientific, engineering, and socio-economic factors in environmental impact assessment.	WL+W B	10
2.	<b>Identification of quantitative and qualitative environmental evaluation criteria</b> ; application of traditional and other techniques for assessing impacts of predicted changes in environment quality.	WL+E F	8
3.	<b>Approaches for identifying</b> , measuring, predicting, and mitigating environmental impacts ; modeling techniques employed in environmental impact assessment	WL	7
4.	<b>Environmental standards and environmental impact assessment process</b> ; and methodologies for incorporating environmental impact assessment into management decision making. Students will learn to prepare an environmental impact prediction, and apply environmental impact assessment as a tool in management decision making.	EF	8
5.	<b>Case studies of environmental impact assessment</b> for several types of engineering/ science project are employed.	WL	12