

GUJARAT TECHNOLOGICAL UNIVERSITY
Environmental Impact Assessment (Elective)
SUBJECT CODE: 1075504
B.PLAN 7th SEMESTER

Aim: To introduce the students to the process of environmental impact assessment and analysis

Objective:

1. To explain and assess the process, and underlying principles and concepts, of environmental impact assessment (EIA).
2. To explore the methods and techniques used in the stages of the EIA process.
3. To introduce students to the legal, economic, administrative and technical process of preparing and/or evaluating environmental impact documents.

Teaching and Examination Scheme:

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	VIVA (V)	PA(I)	
2	0	0	2	50	50	0	0	100

L- Lectures; T- Tutorial/Teacher Guided Student Activity/Field work; P- Practical; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment.

Content:

Sr. No.	Content	Total Hrs
Unit - 1	Introduction to EIA, Brief History of Environmental Impact Analysis, EIA as research, EIA as decision making process, EIA in Global Affairs.	2
Unit - 2	Relevance of EIA Process in India Factors influencing environment; Need of EIA; Use of the EIA process India, Organisation and legal structure, Roles of the players in the environmental review process, EIA process in India	6
Unit - 3	Conducting EIA study Public agency administrative processes, existing laws and guidelines; Basic principles for evaluation of the EIA process; Conducting Environmental Impact Assessment: Screening; Scoping; Baseline Data Collection ; Impact Analysis and Prediction; Consultation & Participation; Analysis of	14

	Alternatives; Mitigation and Impact Management; Formulating EIA Report; Review; Decision-making; Monitoring and follow-up	
Unit - 4	EIA of large scale development projects The land & infrastructure development process as it relates to EIA; understanding through casestudies	6
Unit - 5	Environmental Management in India Administrative, Legislative and executive framework; Relevant laws & Acts	4
	Total no. of hours	32

Reference Books:

Text / Reference Books:				
S. No.	Name of Authors	Titles of the Book	Edition	Name of the Publisher
1	Sapru, R. K. Ed.	Environment management in India. Vol.1.	1987	Ashish Publishing House
2	Sapru, R. K. Ed.	Environment management in India. Vol.2.	1987	Ashish Publishing House
3	Govardhan, Veerlapati	Environmental impact assessment of Tehri Dam.	1993	Ashish Publishing House
4	Canter, Larry W.	Environmental impact assessment.	1996	McGraw-Hill
5	Ahmad, Yusuf J.	Guidelines to environmental impact assessment in developing countries.	1985	Hodder and Stoughton
6	McEvoy, James	Handbook for environmental planning: the social consequences of environmental change.	1977	Wiley

Course Outcome:

List of Exercises / Practicals:
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1.	Visit to Environmental Consultants office
List of Assignments/Tests:	
1	Test on Unit 1 and Unit 2.
2	Case Study based Assignments on Unit 4 or Unit 5.