

Title of the Course:	Mini Project	L	T	P	Credit
Course Code:	UCVHN0751	-	-	04	02

Course Description:

This course provides students with an opportunity to apply fundamental and advanced civil engineering knowledge to solve real-world problems through project based learning. It focuses on identifying community needs, developing feasible engineering solutions, applying analytical and modelling tools, and enhancing teamwork, communication, and project management skills.

Course Learning Objectives (CLOs)

The objectives of this course are to:

1. Identify real-life civil engineering problems based on community needs
2. Develop feasible and sustainable engineering solutions
3. Apply analytical, mathematical, and ICT-based tools for modelling and design
4. Enhance teamwork, communication, and project execution skills

Course Outcomes:

COs	After the completion of the course the student should be able to	Bloom's Cognitive	
		Level	Descriptor
CO.1	Identify and analyze community needs for civil engineering problems	3,4	Apply & Analyze
CO.2	Develop a feasible solution in the form of product/process/service	of 3	Apply
CO.3	Analyze and design appropriate physical/mathematical/ICT-based models	4	Analyze
CO.4	Demonstrate teamwork, communication and project management skills in executing mini project	6	Create

CO-PO Mapping:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO.1	1	1	1	-	-	3	3	-	-	-	1
CO.2	2	3	2	3	2	3	-	-	3	3	3
CO.3	3	3	2	3	3	3	-	-	3	2	3
CO.4	-	-	-	1	-	-	-	3	3	1	-

COs	PSO1	PSO2	PSO3
CO.1	1	1	-
CO.2	3	3	2
CO.3	1	3	2
CO.4	-	-	2

Assessments:

Teacher Assessment:

The assessment of Mini Project shall be based on **Oral Examination (OE)** conducted at **End Semester (ESE)** for **100 Marks**

Assessment	Weightage (Marks)
ESE(OE)	100

- ESE: Assessment is based on completion of mini project and presentation given by student groups.

Mini projects shall consist of followings (but not limited to):

Mini Projects shall consist of (but not limited to):

- Minor experimental work on techno-social issues
- Computer-based analysis and design
- Structural audit and health monitoring
- Innovative civil engineering materials
- Environmental impact assessment
- Water supply and irrigation schemes
- Rainwater harvesting
- Sewerage and waste management systems
- Transportation engineering studies

Guidelines:

- 1 Mini-project is a group activity; each group should be of minimum 2 students and maximum 3 students.
- 2 Each batch shall consist of 2 to 3 groups. Not more than one batch should be assigned to a single faculty.
- 3 After interactions with course coordinator and based on comprehensive literature survey/ need analysis, the student shall identify the title and define the aim and objectives of mini-project.
- 4 Student is expected to detail out methodology, software required, critical issues involved in analysis /design and implementation and submit the proposal within one week of the semester.
- 5 Use of relevant software is preferred.
- 6 Completed mini project and documentation in the form of report and is to be submitted before the end of semester assessment.
- 7 Schedule for Presentation:
 - 1 Synopsis Presentation
 - 2 Presentation given by student groups after every 2 weeks – ISE Assessment
 - 3 Final presentation – ESE Assessment