

Branch Name:	Civil Engineering
Program Code:	ET106
Course Name:	Engineering Project-I
Course Code:	2ET1060707P
Pre-requisite Course:	Students should possess fundamental and practical knowledge of core civil engineering subjects, supported by analytical, design, and software skills, along with prior exposure to minor project work and field/laboratory practices

Course Objective:

1. To identify and define real-world civil engineering problems
2. To develop skills in literature review and problem formulation
3. To plan methodology for design, experimentation, or analysis
4. To introduce project planning and management tools
5. To develop initial technical documentation and presentation skills

Teaching and Examination Scheme:

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								Total (Marks)
					Theory (Marks)				Practical (Marks)				
	L	T	P	Total	SEE		CCA		SEE		CCA		
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
6	-	-	12	12	-	-	-	-	30	75	30	75	150

Subject Contents:

Project Categories (Any One)

Students may select projects from:

- Design-based projects (basic structural, environmental, or transportation systems)
- Experimental/research-based projects (preliminary testing and analysis)
- Field-based projects (data collection, survey, case studies)
- Software/simulation-based projects (basic modelling using tools)
- Internship-based projects (initial study and problem identification)

Project Execution Plan

Phase 1: Problem Identification & Literature Review (Weeks 1–4)

Selection of project topic, detailed literature review, identification of research gaps, formulation of problem statement, and definition of objectives.

Phase 2: Planning & Methodology Development (Weeks 5–7)

Development of methodology, identification of tools/techniques, preliminary data collection, and preparation of work plan including Gantt chart.

Phase 3: Preliminary Work (Weeks 8–11)

Initial design calculations, pilot experiments, or preliminary modelling work, and validation of methodology.

Phase 4: Initial Results & Review (Weeks 12–14)

Analysis of preliminary results, refinement of approach, and partial outcome evaluation.

Phase 5: Documentation & Presentation (Weeks 15–16)

Preparation of interim project report, presentation of work completed, and future work planning for Project-II.

Project Monitoring & Evaluation

Internal Continuous Assessment (75 Marks)

Component	Description	Marks
First Presentation	Problem identification, literature review	15
Mid-Sem Presentation	Methodology and planning	15
Final Presentation	Preliminary work and outcomes	15
Project Report (Interim)	Documentation quality	30
Total		75

Course Learning Outcome:

CO1 (L2 – Understand)

Understand and identify real-world civil engineering problems.

CO2 (L3 – Apply)

Apply engineering knowledge to formulate problem statements and objectives.

CO3 (L3 – Apply)

Develop methodology and planning for solving engineering problems.

CO4 (L4 – Analyze)

Analyze preliminary data, design, or experimental results.

CO5 (L3 – Apply)

Prepare technical reports and present project work effectively.