

Branch Name:	Mechanical Engineering / Computer Engineering / Information Technology / Information and Communication Technology / Artificial Intelligence and Data Science / Electrical Engineering
Program Code:	ET101/ ET103 / ET105 / ET107 / ET108 / ET109
Course Name:	Engineering Project - I
Course Code:	2ET1000601P
Pre-requisite Course:	Communication Skill, Engineering Mathematics, Core Departmental Courses (till 5th semester)

Course Objectives:

1. This course is designed to provide greater emphasis on project-based learning by encouraging students to explore, analyze, and understand existing research and technologies relevant to their proposed final-year project.
2. The aim is to initiate students into the process of structured inquiry through literature reviews, internships, summer projects, or participation in technical events. Students are encouraged to fabricate and demonstrate innovative solutions, machines, or products as a part of this course.

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.	
02	-	-	04	04	-	-	-	-	10	25	10	25	50

Course Contents:

Sr. No.	Activity	Week
1.	Project area identification and topic selection	1-2
2.	Collection of relevant research papers, patents, standards, and market studies	3-4
3.	Literature review and gap analysis	5-6
4.	Framing the problem statement and defining objectives	7-8
5.	Identification of methodology and tools required	9-10
6.	Compilation of review findings and proposal development	11
7.	Drafting and formatting of the literature review report	12-13
8.	Submission of final report and seminar/viva-voce	14

Implementation Guidelines:

- Students can work individually or in groups (maximum of 3–5 members).
- Each group must be assigned a faculty guide for regular supervision.
- All references must be cited properly using standard citation formats (e.g. APA/IEEE).

- Students should submit a minimum of 15–20 reviewed sources in their report.
- Report should include: abstract, introduction, literature review summary, problem statement, proposed methodology, and references.

Course Learning Outcomes (CLO):

On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Identify a relevant engineering problem or area of interest based on current technological trends and societal needs.	1 Remembering 2 Understanding
CLO2	Interpret and summarize technical literature, including research papers, patents, and industry standards related to the selected topic.	2 Understanding
CLO3	Analyze existing solutions and technologies to determine limitations, challenges, and scope for improvement.	4 Analyze
CLO4	Compare and evaluate various methodologies, tools, and approaches used in previous works.	5 Evaluating
CLO5	Formulate a well-defined problem statement and project objectives based on identified research gaps.	3 Applying 6 Creating
CLO6	Develop and present a structured project proposal and literature review report with proper citations and documentation.	6 Creating

Mapping of CLOs with POs & PSOs:

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes(PSOs)	
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CLO1	M		L			M	L				L			L
CLO2			M	M	L	L							L	
CLO3		L	M		H			L		M			L	
CLO4	L	L	M		H			L	M	M			M	
CLO5		M		M	L		L							M
CLO6	M							M		M	L	L		L

H: High, M: Medium, L: Low