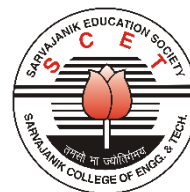




SARVAJANIK UNIVERSITY
Sarvajani College of Engineering and Technology
Bachelor of Technology



B. Tech. Semester VII

Subject Name: Design Project

Subject Code: BTEC16701

Type of course: PCC

Prerequisite: Electronic components, simulation tools

Rationale: This subject will provide a technical platform to the students to develop their technical and non-technical skills. It will also help them to understand the overall cycle for designing projects and validate the design before developing the prototype of it. It will also help them to gain knowledge regarding latest updates and development in the domain of electronics and communication.

Teaching and Examination Scheme:

Teaching Scheme				Theory Marks			Practical Marks		Total
L	T	P	C	TEE	CA1	CA2	TEP	CA3	
0	0	4	2	--	--	--	60	40	100

CA1: Continuous Assessment (assignments/projects/open book tests/closed book tests **CA2:** Sincerity in attending classes/class tests/ timely submissions of assignments/self-learning attitude/solving advanced problems **TEE:** Term End Examination **TEP:** Term End Practical Exam (Performance and viva on practical skills learned in course) **CA3:** Regular submission of Lab work/Quality of work submitted/Active participation in lab sessions/viva on practical skills learned in course

Content:

The project work will be carried out by a group of at the most 4 students. Students need to work on real life community/society based project using the Design Thinking process. It is essential for students to enhance and refine their learning by said process, keeping System Approach in mind while working on projects.

Following points need to be considered for Design Thinking Process

- Plan of Action
- Detailed Design (including all aspects of products, material, process, resources, standards etc.)
- Software and Hardware selection and validation
- Prototyping
- Final working model

The topic may be selected considering from the following points.

1. Laboratory work involving constructional theoretical and design aspects of the project/ system.
2. Modification aspect of existing electronics systems.
3. It can be practical need of the industry, which should involve system design aspect.
4. Survey of latest development in Electronics and allied fields.

It shall consist of the term work in the form of typed report not less than 40 pages. This should include the literature survey technical details related data that is collected & design that are required



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for project work part.

Practical Examination: An oral Viva-Voce examination in form of PowerPoint presentation followed by hardware/software demonstration will be conducted at the end of the semester by a team of examiners.

Course Outcome:

Sr. No.	CO Statement After learning this subject students will be able to	Marks % weightage
CO-1	Develop innovative and creative ideas.	15
CO-2	Plan and identify materials, processes and other resources optimally	25
CO-3	Develop a sense of environmental responsibility.	15
CO-4	Develop leadership, interpersonal skills and team work.	25
CO-5	Explain latest development in the domain of selected project	20

Mapping with POs:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
CO-1	3	3	3	3	3	2	2	-	-	3	-	3	3	3	3
CO-2	3	3	2	3	2	-	-	-	-	3	3	-	3	3	3
CO-3	-	-	-	-	1	3	3	3	-	-	-	-	-	-	-
CO-4	-	2	1	1	1	3	-	-	3	3	3	3	3	3	3
CO-5	3	3	2	2	3	-	2	-	-	-	-	3	3	3	3