



SARVAJANIK UNIVERSITY
Sarvajani College of Engineering and
Technology



Mechanical Engineering Department

B. Tech. Semester VII

Course Name: Design Project

Course Code: BTME16706

Type of course: Project (PROJ)

Prerequisite: Nil

Rational of course: To enhance the employability skills of the students, Design project work is very much essential. It provides practical experience in a field of Mechanical Engineering and help to reinforce theoretical and practical knowledge gained in different core and elective courses to solve real life challenges.

Teaching and Examination Scheme:

TEACHING SCHEME				Theory Marks			Practical Marks		Total
L	T	P	C	TEE	CA1	CA2	TEP	CA3	100
0	0	4	2	00	00	00	60	40	

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

Contents:

The students are required to prepare term project on given topic. The students will undertake project work for the period of full semester. They may opt for design/develop & fabricate small innovative product. They are supposed to prepare and submit a project report as a part of their term work and give presentation on their work. The faculty should monitor the students for their project work regularly every week. They are to be examined based on viva and/or demonstration.

Course Outcomes (CO):

Sr. No.	CO Statements After learning this subject, students will be able to	Marks % weightage
CO-1	Demonstrate a sound technical knowledge of their selected project topic.	20%
CO-2	Undertake problem identification, formulation and solution.	20%
CO-3	Design engineering solutions to complex problems utilising a systems approach and team work.	30%
CO-4	Communicate with engineers and the community at large in written and oral forms.	20%
CO-5	Demonstrate the knowledge and understanding of engineering and management principle and apply it to assigned project.	10%



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Mapping of (CO's) with Program Outcomes (PO's) and Program Specific Outcomes (PSO's):

	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	2	2	2	1	0	0	1	1	0	0	0	3	1	1
CO-2	2	3	1	1	1	1	1	0	2	1	1	1	2	1	1
CO-3	2	1	3	2	3	0	0	1	2	1	0	0	2	3	1
CO-4	0	0	0	0	0	1	0	0	0	3	1	2	0	0	2
CO-5	1	0	0	0	0	0	0	0	0	0	3	1	0	0	1
Rationale*	8	6	6	5	5	2	1	2	5	5	5	4	7	5	6

*** Rationale - Mapping of CO's with PO's and CO's with PSO's:**

This course highly maps with PO and PSO. It states that the course will develop. This Course also focuses on Engineering knowledge, Problem analysis, Design / development of solutions, Conduct investigations of complex problems, Modern tool usage, The engineer and society, Environment and sustainability, Ethics, Individual and teamwork, Communication, Project management and finance, Life-long learning.