25CV104: Departmental Workshop (Civil)

w. e. f. Academic Year:	**2025-26**
Semester:	**1/2**
Category of the Course:	**Engineering Science**
Prerequisite:	Zeal to learn the subject
Rationale:	Department Workshop can serve as a valuable educational resource, offering explanations, guidance, and support across various aspects of civil engineering., educators can enhance student engagement and understanding, bridging the gap between theoretical knowledge and practical application.

Course Outcomes:

After Completion of the Course, Student will able to:

	Course Outcome (CO)	**RBT Level (Cognitive Domain)**
CO1	Understand and demonstrate the correct use of measuring instruments	Understand / Apply
CO2	Analyze and construct various brick bonds for wall panel creation	Understand/ Analyse
CO3	Apply principles of architectural planning to design residential bungalows	apply/ Create
CO4	Evaluate spatial requirements and design effective toilet layouts	Evaluate/ Create
CO5	Understand and apply fundamental plumbing principles in building planning	Understand / Apply
CO6	Integrate planning, bonding, and service systems to produce a coordinated building layout	Create

Teaching and Evaluation Scheme:

Teaching Scheme					**Examination Scheme**				
L	**T**	**P**	**C**	**Hrs/Week**	**IE**	**Theory**	**CIA**	**Practical**	**Total Marks**
-	-	02	01	02	-	-	30	20	50

IE: Internal Evaluation Theory: Theory Exam (End Semester)

CIA: Continuous Internal Assessment Practical: Practical Exam (End Semester)

List of Practical:

Sr. No.	**Title**	**Hours**
1.	Setting out of a Room: The student should set out a building (single room only) as per the given building plan using tape only.	4
2.	Construct a wall using plumb bob for different types of bonds.	6

3.	Perform the lineout activity on the site for the given type of foundation work	4
4.	Draw with scale: Plan of their own house.	4
5.	Planning of Toilet for house and any one public building (Group activity)	4
6.	Planning of plumbing and Electrification in 2 BHK Bunglow	4
7.	Collect brochure of residential building, study the plan	4
	Total Hours	30

Text/ Reference Books:

1. Introduction to civil Engineering by Bhogayata, Shah &Vora – Tata McGraw hill.
2. Surveying Vol. I by B.C. Punamia.
3. Building construction by B.C. Punamia.
4. Building Material by S.C.Rangwala.

Course Outcomes Mapping:

CO	Course Outcome (CO)	POs/PSOs Mapped	Cognitive Level (RBT)	Knowledge Category	Lab Sessions (Hrs)
CO1	Understand and demonstrate the correct use of measuring instruments	PO1, PO5, PSO2	Understand / Apply	Procedural	4
CO2	Analyze and construct various brick bonds for wall panel creation	PO1, PO3, PO5, PSO2	Understand / Analyse	Procedural, Conceptual	6
CO3	Apply principles of architectural planning to design residential bungalows	PO2, PO3, PO6, PSO1	Apply / Create	Conceptual	6
CO4	Evaluate spatial requirements and design effective toilet layouts	PO3, PO6, PO7, PSO1	Evaluate / Create	Procedural, Conceptual	4
CO5	Understand and apply fundamental plumbing principles in building planning	PO1, PO3, PO7	Understand / Apply	Conceptual	4
CO6	Integrate planning, bonding, and service systems to produce a coordinated building layout	PO2, PO3, PO5, PO11,PSO1, PSO2,	Create	Procedural	6

Mapping of COs with POs & PSOs:

CO	PO												PSO	
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
CO1	3	0	0	0	3	0	0	0	0	0	0	0	0	3
CO2	3	0	3	0	3	0	0	0	0	0	0	0	0	3
CO3	0	2	3	0	0	2	0	0	0	0	0	0	3	0
CO4	0	0	3	0	0	2	2	0	0	0	0	0	3	0
CO5	3	0	3	0	0	0	2	0	0	0	0	0	0	0
CO6	0	2	3	0	3	0	0	0	0	0	0	0	3	0

3: High, 2: Medium, 1: Low