

**GUJARAT TECHNOLOGICAL UNIVERSITY**Syllabus for Diploma of Vocation (D.Voc), 2nd Semester

Branch: Architectural Assistantship

Subject Name: Construction Technology – II

Subject Code: 1220601

With effective
from academic
year 2021- 22**Teaching and Examination Scheme:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	P	OJT		Theory		Tutorial / Practical		
			University exams (ESE)	Progressive Assessment (PA)	External Practical/ Viva Exam (ESE)	Internal Practical/ Viva Exam (ESE)		
3	-	-	3	50	-	-	-	50

L-Lecture; P-Practical; OJT – On Job Training; C – Credit; ESE – End Semester Examination; PA – Progressive Assessment

SEMESTER II**Focus:**

Introduction to types of building materials- study of materials of construction such as sand, lime, cement, aggregate. Their Structural and physical behavior with respect to its properties and application in building.

SR NO	Contents:	HR
1	<ul style="list-style-type: none"> Floors - Types and details of building elements like weather shed, balcony, canopy and pergolas. Timber Floors – Single, double and framed floors with joints between joist with wall plate, joist with beam and sub beam with main beam, strutting of joists, use of templates, for support. 	12
2	<ul style="list-style-type: none"> Openings- Arches and lintels, different types of doors, windows, ventilations and skylights in different materials and their operational and fixing details. 	10
3	<ul style="list-style-type: none"> Staircase - Different types of staircases and its application and construction methods. Types of finishes, types of railings and components of staircase. 	12
4	<ul style="list-style-type: none"> Walls- Different types of walls and their construction details various types of wall finishes, like plastering, painting, cladding, jointing, & pointing etc. and their applications. 	10
	Total	42

Projects:

Market survey, detailing sketches, site visits and understanding of materials and its fixing /joining details etc.

Skills:

Understanding of materials, its science and properties, sizes etc.

Method:

Theory lectures, Seminars, Expert lectures, Site visits and Report writing.

References:

- Barry R.- Construction of Building
- Chudley- Construction Technology
- Mackey W.B.-Building Construction
- Mitchell and J.- Building Construction
- Punamia B.C.; Jain Ashok K. Jain Arun K.-Building Construction
- Rangwala-Building Construction
- Rangwala-Building Materials

Suggested Specification table with Marks (Theory):

Distribution of Theory Marks				
R Level	U Level	A Level	N Level	E Level
5	20	15	5	5

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate and above levels (Bloom's Taxonomy)