



GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma of Vocation (D.Voc), 3rd Semester
Branch: Architectural Assistantship
Subject Name: Building Envelope-II Material and Execution
Subject Code: 1230607

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	P	OJT		Theory		Tutorial / Practical		
			ESE (E)	PA(M)	ESE (V)	PA (I)		
-	15	-	15	0	-	100	100	200

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

SEMESTER III

Contents:

Study and understanding building materials used in building design

- Building Materials:
 - Metal – Ferrous and non-ferrous – Iron, Steel, aluminum, used in building elements. Its advantages and disadvantages.
 - Use of glass in building – structural and non-structural
- Paints and various internal and external finishes.
 - Types of paints, its method of application and maintenance
 - Types of external finishes and method of application
- Understanding structural system for large spaces.
 - Material used in large span. Design fundamentals and thumb rules to design large span structures.
 - Physical and behavioral properties and the methods of application.
- Detail Study of various components of buildings with above materials through sketches, models, etc. after doing market survey and site visits.
- Survey techniques to be understood and use on site.

Course Outcome: Develop understanding of building material used in market.
 Develop understanding of structural system of large spaces and its physical behavior.