

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BRANCH NAME: BACHELOR OF INTERIOR DESIGN**  
**SUBJECT NAME: INTERIOR MATERIAL & TECHNOLOGY –I**  
**SUBJECT CODE: 2X15104**  
**1<sup>st</sup> Year: Semester: 1**

**Prerequisite:**

It is a beginner course. There is no prerequisite for this course.

**Rationale:**

- Overview of Building Industry
- Role of Designer in the scheme of overall building industry
- Exposure to various materials used construction for different elements of building
- To make students aware of the various elements and impart basic knowledge and functioning of the various parts.
- Site visits/ sketches/ write up of technical reports are considered essential at this stage.
- Collect information regarding manufacturing qualities, varieties and uses.

**Teaching and Assessment Scheme:**

Teaching Scheme			Credits C	Examination Marks				Total Marks	University Exam Type
Field work	Lectures	Studio		External exam		Internal exam			
				(ESE)Theory	(ESE) Viva	(PA)Theory	(PA)Viva		
02	00	02	04	40	NA	60	NA	100	DRAWING EXAM

**Content:**

Sr. No.	Content	Total Hours*	% Weightage*
1	<p><b>Unit 1: Elements of building</b></p> <ul style="list-style-type: none"> <li>● Introduction of building and its different elements like foundation, plinth, floor and super structure, roofs, openings, stairs, overhangs, partitions, ceilings, structural members etc., Understanding of function.</li> </ul>	20	30
2	<p><b>Unit 2: Introduction to materials</b></p> <ul style="list-style-type: none"> <li>● Their physical and behavioral properties, methods and tools of application, criteria for selection of materials based on design etc.</li> <li>● Material: sand, cement, lime, mud, brick, stone, concrete</li> <li>● Visual quality of materials in terms of texture, colour and pattern.</li> </ul>	20	30

3	<b>Unit 3: Construction</b> <ul style="list-style-type: none"> <li>● Study of brick and stone masonry - all kinds of masonry construction.</li> <li>● Study of partitions and infill walls.</li> <li>● Light weight/ concrete blocks constructions.</li> </ul>	24	40
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\*: indicative

**Reference Books:**

- Construction of Building Vol.-I-R. Berry
- Building Construction Metric Vol.-II-W.B McKay
- Construction Technology Vol.-I- Chudley
- Building Construction Illustrated- Francis D.K. Ching
- Engineering Materials –S.C. Rangwala (coursebook)
- Building Materials–B.C.Punamia (Additional Reference)
- Time Savers Standards –Building Materials and Systems – Donald Watson( Advanced Reference)

\*- this is suggestive for common purpose. Faculty may decide on this, considering student group and institution philosophy.