

L J School of Architecture

Syllabus for B.Arch. 2019

First Year | Semester 1

Subject Code: 103 | Subject: Building Construction Drawing I | Credit: 04

Course Content:

- Understanding the basic building elements, building materials and construction processes through drawings.
- Introduction to the structural and non-structural building elements and vocabulary.
- Understanding the Building Elements: 1. Functions and Design
2. Important Building Components
3. Foundation, Plinth and Superstructure.
4. Typical wall section.
- Study of basic building materials and their properties: Brick, Mud, Stone, Timber, Bamboo, cement, etc.
- Study the construction techniques with examples and case-studies of materials like: Brick, Stone, Mud, etc.

Methodology:

- Lectures, Studios, drafting, case-studies, sketching, Site visit, Model making, presentation, group work.

Reference:

1. Ash, Ahmed. Materials science in construction: an introduction. London: Taylor & Francis, 2015
2. Agrawal, B. K.. Introduction to Engineering Materials. New Delhi: Tata McGraw Hill Education Ltd.,2013.
3. Bhavikatti, S. S.. Materials of Construction Vol - 2. New Delhi: I. K. International Publishing House Pvt. Ltd., 2014
4. Charleson, Andrew. Structure as architecture: Source book for architects and structural engineers .London: Taylor & Francis, 2015
5. Gambhir, M. L.. Building Materials: Products, Properties and Systems. New Delhi: Tata McGraw Hill Education Private Limited, 2011
6. Khurmi, R. S.. Strength of Materials: Mechanics of Solids. New Delhi: S. Chand & Company Ltd.,201