

EMPHASIS:

- Understanding each material with its structural and finishing properties
- Understanding various system of construction and framing of openings with stress on doors and windows, their frames and related details.
- Understanding with case studies, site visits, sketches and drawings.

CONTENTS:

- Metal - Ferrous and Non - Ferrous - Iron, Steel, and Market form of Steel, Aluminum, Copper, and Lead etc. - their Uses in Building Industries.
- Paints and Varnishes - Paints, Varnishes, Distempers, White-washing, colour washing etc. - types and processes.
- Timber - Veneers, Plywood's, Fiberboards etc.
- Light weight concrete - types, aggregates, manufacturing relative processes etc.
- Materials and details of making openings: Doors and windows details; External / Internal walls - Arches
- Staircases and its elements: Construction of simple staircases and details. Balconies - related elements
- Damp proofing courses at various levels flooring
- Finishes for Horizontal surfaces: Concrete floor, tiles, stones, marble, granite, bricks, wood etc. and combination of materials.
- Finishes for vertical surfaces: Plaster, sandblasting, exposed aggregate, wood, wallcovering, ceramic tiles, mud-bamboo, paints and plastics.
- Understanding roof and roof finishes: Concrete, tiles, wood etc.
- Functions of structures. Primary and secondary forces acting on structure gravitational force, life load, wind, temperature variation
- Understanding of structural behavior in building & interior masonry walls, bonds, basic spanning elements (R.C.C. & Steel)
- Understanding of basic structural members ; Characteristic requirements of structural design strength, stiffness and stability. Discussion on factors affecting them and ways of satisfying these requirements