

(Course Syllabus)

This course is intended to giving civil engineering students an idea about building components, structures, envelopes, Architectural Drawings, and working drawings environment.

The course is divided into two sections : Theoretical & Practical.

Theoretical Section :

- 1- Basics of the building envelope & factors that affect it.
- 2- Building materials in general (old and new).
- 3- Types of foundations (Stone & Concrete).
- 4- Cast-in-site concrete structural systems.
- 5- Precast concrete systems.
- 6- Steel structural systems.

Practical Section :

- 1- Basics of the architectural floor plan.
- 2- Basics of sections & elevations
- 3- Drawing structural plans such as :
Foundation layout, grade beams plan, slab reinforcement plan, and reinforcement schedules for footings, columns, grade beams, and beams.

Tools required for the practical section :

Student must bring with him the following items on each session:

- 1- T square with triangles
- 2- Screw type pencil (2mm thick leads)
- 3- Tape, eraser, and sharpener.
- 4- 50x70 Canson Paper 240g (15 sheets)

References :

- 1- Building Construction Illustrated, by Francis D.K. Ching & Cassandra Adams
- 2- Barry's Advanced Construction of Buildings, by Stephen Emmitt & Christopher Gorse.
- 3- Any additional lecture notes given by the instructor.

Student evaluation critira :

Theoretical section	40 % of the grade
Practical section	60 % of the grade