Course Syllabus

020OSBGS4 , Buildings and Frames – Ossatures des Bâtiments.

1. **Course Number and Name:** 020OSBGS4 , Buildings and Frames – Ossatures des Bâtiments.
2. **Credits and Contact Hours:**4 credits, 35 hours.
3. **Instructor's or Course Coordinator's Name:** Nadim CHOUERI
4. **Textbook and Other Supplemental Material:**
   - **a.** André Coin : Ossatures des Bâtiments – Eyrolles - 1998
   - **b.** Henri Thonier : Conception et calcul des structures de bâtiment – Presses Ponts et Chaussées.
   - **c.** Eurocodes
   - **d.** Instructor's Class Notes
5. **Specific Course Information**
   - **a. Catalog Description:**
     Design the reinforced concrete elements of a building; the courses focuses essentially on the actions on structures, the calculation of reaction loads ,the loads rundown, the design of foundations, various types of slabs, stairs…
   - **b. Prerequisities:** 020BEAGS3 (Reinforced Concrete).
   - **c. Required/Elective/Selected Elective:** Multidisciplinary Project-Building Design and Structure…
6. **Specific goals for the course:**
   - **a. Specific outcomes of instruction:**
     - The aim of the course is to link the mechanics of materials with reinforced concrete, in order to design building structures that are economical, durable, resistant and compatible with the architectural constraints…
     - In this course, actions on structures will be defined and designed, and the required calculations will be carried out for a good performance of the structure.
     - Remarks and notes mentioned during the lectures are based on discussions and deductions from actual execution projects.
   - **b. KPIs addressed by the course:**

KPI	a2	c2	e1	e3	g1	k2	k3
Covered	x	x	x	x	x	x	x
Assessed							
Give Feedback							

7. **Brief list of topics to be covered and approximate number of lectures:**
   1. Introduction 2 h
   2. Structural load calculations – Loads rundown – Dimensioning 7 h
   3. Foundations 10 h
   4. Slabs 10 h
   5. Stairs 4 h
   6. Preparation of multidisciplinary project and final summary 2 h