Course Syllabus

1. **Course number and name:** 020BPRGS5, Prestressed Concrete in Buildings
2. **Credits and contact hours:** 2 ECTS credits, 17.5h
3. **Instructor's or course coordinator's name:** Guy Tabet
4. **Textbook and other supplemental material:**
    a. Instructor's Class notes

5. **Specific course information**
    a. **Catalog description:** Explain the basic principles of the behavior of prestressed concrete structures with an emphasis on building applications.
    b. **Prerequisites:**
    c. **Required/Elective/Selected Elective:** Required Engineering course in Buildings option.

6. **Specific goals for the course**
    a. **Specific outcomes of instruction:**
    b. **Specific outcomes of instruction**:
        - Historical View of Prestressed Concrete.
        - Different Procedures of Prestressed.
        - Losses Calculation of Prestressed cables.
        - Flexure in Service and Ultimate Design of Prestressed Concrete.
        - Shear Design.
        - Material characteristics and behavior.

    c. **KPIs addressed by the course**:

KPI	a2	c1	c2	e1	e2
Covered	x	x	x	x	x
Assessed					
Give Feedback					

7. **Topics and approximate lecture hours:**
    - Historical View of Prestressed Concrete (2 lectures)
    - Different Procedures of Prestressed (3 lectures)
    - Losses Calculation of Prestressed cables. (3 lectures)
    - Continuity in pre-stressed concrete beams definition and design (2 lectures).
    - Flexure in Service and Ultimate Design of Prestressed Concrete (2 lectures).
    - Material characteristics and behavior (2 lectures).