

Course Syllabus
020OSPGS5 Special Topics in Concrete

1. **Course number and name:** 020OSPGS5 Special Topics in Concrete
2. **Credits and contact hours:** 2 credits, 17.5 course hours
3. **Instructor's or course coordinator's name:** Rodolphe MATTAR
4. **Textbook and other supplemental material:**
 - a. Eurocode 1 to 8 , BAEL , BPEL
 - b. Henry Thonier, Conception et Calcul des Structures Tome 1 to 6, Edited, Presses des Ponts. Paris, France.
 - c. Marius Diver , Calcul Pratique des Tours en Beton Arme ,Edited Dunod ,Paris ,France.
 - d. Instructor's Class Notes
5. **Specific course information**
 - a. **Catalog description:** Special Topics Course is developed to cover specialized content not represented in the main curriculum , the course introduces students to a variety of design practices related to : different shapes of water reservoirs in upper and under ground situations ; Water Towers in reinforced concrete ; Industrial Tall Chimneys design and construction procedures ; Maritime Protection design (Introduction) .
 - b. **Prerequisites:** 020BEAGS3 Reinforced Concrete;
 - c. **Required/Elective/Selected Elective:** Required major course for Buildings and Engineering Management and Public Works and Transportation Specialty students.
6. **Specific goals for the course**
 - a. **Specific outcomes of instruction:**
 - Introduce Students to the concept design of structures related to special building and infrastructure works.
 - Analytical approach for the pre-dimensioning of structural elements of the construction.
 - Familiarize the students to method statements related to special construction.
 - Develop the theoretical framework needed for the design of special building structures.
 - b. **KPIs addressed by the course:**

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

7. **Brief list of topics to be covered and approximate number of lectures:**
 - 1- Introduction (2 Hours)
 - 2- Flat And Tall Reservoirs Design In Concrete (2 Hours)
 - 3- Underground Reservoir In Concrete (2 Hours)
 - 4- Water Towers (4 Hours)
 - 5- Industrial Chimneys Design (2 Hours)
 - 6- Introduction To Maritime Protection (2 Hours)