

Protection and Aesthetics of Buildings

1. **Course number and name:** 020PECGS4 Protection and Aesthetics of Buildings
2. **Credits and contact hours:** 2 ECTS credits, 1x1.25 hours
3. **Name(s) of instructor(s) or course coordinator(s):** Joseph KOZEILY
4. **Instructional Materials:**
 - a. Instructor's Class Notes
 - b. Hardcopy of the course prepared by the instructor
5. **Specific course information**
 - a. **Catalog description:** Goal: This course deals with the aspects of protection and aesthetics of buildings, Paints, waterproofing problems etc.
Contents: The elements of the mixing water and their influence on the constructions - Admixtures - Products-Cement - Protection products and applications - Aesthetics (Painting and decorative products) - Plastic products (electrical - heating - expansion joint ...) - Repair of Constructions (injection - removal of stains - adhesives and sealants)
 - b. **Prerequisites or co-requisites:** None
 - c. **Required:** Restricted Elective Course
6. **Educational objectives for the course**
 - a. **Specific outcomes of instruction:**

In civil engineering the main materials always remain the same, concrete and masonry, wood and metals especially steel, which possess constant physical and chemical properties.

In this course we present all the chemical products that can improve these physico-chemical properties and especially those that are intended for the protection and aesthetics of construction.
 - b. **PI addressed by the course:**

PI	1.2	2.1
Covered	yes	yes
Assessed		

7. **Brief list of topics to be covered:**
 - Water (1h 15min)
 - Concrete Admixtures (2h 30min)
 - Cement-based products (2h 30min)
 - Products of protection (2h 30min)

- Protection and Aesthetics of materials (3h 45min)
- Plastics (2h 30min)
- Repair (2h30min)