

29741 - Concrete Structures

Información del Plan Docente

Academic Year 2016/17

Academic center 110 - Escuela de Ingeniería y Arquitectura

Degree 434 - Bachelor's Degree in Mechanical Engineering

ECTS 6.0 **Course** 4

Period Second semester

Subject Type Optional

Module ---

- 1.Basic info
- 1.1.Recommendations to take this course
- 1.2. Activities and key dates for the course
- 2.Initiation
- 2.1.Learning outcomes that define the subject
- 2.2.Introduction
- 3.Context and competences
- 3.1.Goals
- 3.2. Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation
- 5. Activities and resources
- 5.1.General methodological presentation
- 5.2.Learning activities
- 5.3.Program
 - 1. Introduction to reinforced concrete
 - 2. Components of concrete
 - 3. Properties of concrete
 - 4. Basis for calculation. Structural safety
 - 5. Ultimate limit states under axial forces and bending moments



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- 6. Instability due to compression
- 7. Ultimate limit states under shear forces and torsional moments
- 8. Detailing of reinforcement
- 9. Serviceability limit states
- 10. Retaining wall
- 11. Structural walls
- 12. Concrete plates and slabs
- 13. Concrete shells

5.4. Planning and scheduling

5.5.Bibliography and recomended resources