

30724 - Structures 2

Información del Plan Docente

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	470 - Bachelor's Degree in Architecture Studies
ECTS	6.0
Course	3
Period	Second semester
Subject Type	Compulsory
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

The learning process that is designed for this subject is based on the following:

The course is divided into 15 participatory master classes taught by teachers with multimedia support to be provided in due time students . We have also organized a total of seven practical sessions of two hours each 15 sessions and other problems in the form of conferences / seminars, in which students will face difficulties similar to those of test situations.

5.2.Learning activities

The program that the student is offered to help you achieve the expected results includes the following activities ...

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Review of Linear elasticity . Introduction to M.E.F.
Reviewing bars Bernoulli and Timoshenko. Associated finite elements .
Barrasa structures) Typology . b) Lattices. Flat and three-dimensional . c) Structures arcaded .
Plates and sheets. Associated finite elements .
a) plates . Forgings.
b) Blades .
c) Membranes . hyperbolic paraboloid and other more sophisticated ways .
d) Finite elements for plate and sheet
e) Stability of structures

5.3.Program

Review of Linear elasticity . Introduction to M.E.F.
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d) Finite elements for plate and sheet
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5.4.Planning and scheduling

Schedule sessions and presentation of works The timing of the actual classes of theory and problems , as well as computer practice sessions , will the schedule established by the School of Engineering and Architecture. Each teacher will inform tutoring schedules .

5.5.Bibliography and recommended resources

- *La estructura como arquitectura. Formas, detalles y simbolismo. Andrew Charleson. Editorial Reverte
- *La estructura y el proyecto. David García. Escola Sert
- *L'art des structures. Aurelio Muttoni. PPUR presses polytechniques
- *Estructuras para arquitectos. M. Salvadori & R. Heller. Nobuko
- *The function of form. F. Moussavi. ACTAR, Harvard Graduate School of Design
- *La obra de ingeniería como obra de arte. Javier Manterola. LAETOLI