

Structural Technology Seminars (250714)

General Information

School	ETSECCPB
Departments	Departament d'Enginyeria Civil i Ambiental (DECA)
Credits	2.5 ECTS
Programs	MÀSTER UNIVERSITARI EN ENGINYERIA ESTRUCTURAL I DE LA CONSTRUCCIÓ (pla 2015)
Course	2024/25

Main teaching language at each group

- Group 10EN2 English (Q2)

Faculty

Responsible Faculty: Climent Molins Borrell

Faculty: Daniel Alarcón Fernández, Itsaso Arrayago Luquin, Jesús Miguel Bairán García, Rolando Antonio Chacón Flores, Antonio Ricardo Mari Bernat, Climent Molins Borrell, Juan Murcia Delso, Eva María Oller Ibars

Objectives of Education

Subject to acquire knowledge about recent trends in research of structural technology

Capability to learn about the recent advances in research structural technology in civil engineering and building

Recent research progress on structural technology

Competencies

Especific

To conceive and design civil and building structures that are safe, durable, functional and integrated into its surroundings.

Designing and building using traditional materials (reinforced concrete, prestressed concrete, structural steel, masonry, wood) and new materials (composites, stainless steel, aluminum, shape memory alloys?).

To evaluate, maintain, repair and strengthen existing structures, including the historic and artistic heritage.

To apply methods and advanced design software and structural calculations, based on knowledge and understanding of forces and their application to the structural types of civil engineering.

Generic

To conceive, design, analyze and manage structures or structural elements of civil engineering or building, encouraging innovation and the advance of knowledge.

To develop, improve and use conventional materials and new construction techniques to ensure the safety requirements, functionality, durability and sustainability.

To define construction processes and methods of organization and management of projects and works.

Total hours of student work

		Hours	Percentage
Supervised Learning	Large group	12.75 h	56.64 %
	Medium group	4.88 h	21.68 %
	Laboratory classes	4.88 h	21.68 %
	Guided Activities	0.0 h	0.00 %
Self Study		40.0 h	

Contents

Seminars Structural Technology

Seminars of Structural Technology

Teaching Methodology

The course consists of 1:40 hours per week of classroom activity (large size group) during 12 weeks.

The 1:40 hours in the large size groups are devoted to theoretical lectures, in which the teacher presents the basic concepts and topics of the subject, shows examples and solves exercises.

Support material in the form of a detailed teaching plan is provided using the virtual campus ATENEA: content, program of learning and assessment activities conducted and literature.

Although most of the sessions will be given in the language indicated, sessions supported by other occasional guest experts may be held in other languages.

Grading Rules

() The evaluation calendar and grading rules will be approved before the start of the course.*

The mark of the course takes into account the attendance to the seminars and the development of an individual assignment on the field of one of the sessions.

Test Rules

The assignment has to be developed individually.

Bibliography

Basic

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