



Course guide

220237 - 220237 - Fundamentals of Structural Calculation

Last modified: 11/04/2025

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 737 - RMEE - Department of Strength of Materials and Structural Engineering.
Degree: MASTER'S DEGREE IN INDUSTRIAL ENGINEERING (Syllabus 2013). (Optional subject).
Academic year: 2025 **ECTS Credits:** 3.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Rafael Weyler Pérez

Others: Montserrat Sánchez Romero

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Self study	48,0	64.00
Hours large group	27,0	36.00

Total learning time: 75 h

CONTENTS

title english

Description:

content english

Full-or-part-time: 10h

Theory classes: 4h

Self study : 6h

title english

Description:

content english

Full-or-part-time: 28h

Theory classes: 10h

Self study : 18h



title english

Description:

content english

Full-or-part-time: 28h

Theory classes: 10h

Self study : 18h

title english

Description:

content english

Full-or-part-time: 9h

Theory classes: 3h

Self study : 6h

ACTIVITIES

name english

Full-or-part-time: 45h

Self study: 29h

Theory classes: 16h

name english

Full-or-part-time: 30h

Self study: 19h

Theory classes: 11h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Ortiz Berrocal, Luis. Elasticidad [on line]. 3a ed. Madrid [etc.]: McGraw-Hill, cop. 1998 [Consultation: 17/06/2022]. Available on: https://www.ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=3965. ISBN 8448120469.
- Ortiz Berrocal, Luis. Resistencia de materiales [on line]. 3a ed. Madrid [etc.]: McGraw-Hill, 2007 [Consultation: 09/11/2020]. Available on: https://www.ingebook.com/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=3962. ISBN 9788448156336.
- Miroliúbov, I ... [et al.]. Problemas de resistencia de materiales. 6ª ed. Moscú: Mir, 1990. ISBN 503000873X.

Complementary:

- Gere, James M. Resistencia de materiales. 5ª ed. España [etc.]: International Thomson Editores, cop. 2002. ISBN 9788497320658.
- Feodosov, V. I. Resistencia de materiales. 2ª ed. Moscú: Mir, 1980.