



PRESENTATION

SUMMARY: The aim of this course is to introduce the student to the concepts of computer programming and fundamentals of numerical methods. These techniques will help the student tackle and solve problems commonly encountered in the technical and professional world. The theory and practice developed in this course will allow the student to analyze and synthesize different problems and help him in the decision making process.

- **Titulación:** Grado estudios de arquitectura
- **Módulo/Materia:** Menciones / Gestión del Proyecto Técnico
- **ECTS:** 4.5
- **Curso, semestre:** 5º, First Semester
- **Carácter:** Elective
- **Profesorado:** Rufino Goñi (Profesor Titular)
- **Idioma:** English
- **Aula, Horario:** Aula 5, Tuesdays from 9:00 a.m. to 12:00 noon

LEARNING OUTCOMES (Competencies)

BASIC COMPETENCES

BC02: Students must know how to apply their knowledge professionally to their job or career and have the skills that usually demonstrated by writing and supporting their arguments, and problem-solving within their area of study.

BC04: Students are able to convey information, ideas, problems and solutions to specialist and non-specialist audiences.

BC05: Students have developed the learning skills necessary to undertake further studies with a high degree of autonomy.

GENERAL COMPETENCES

GC04: Understand the structural, construction and engineering design problems associated with building design as well as the techniques for solving them.

SPECIFIC COMPETENCES

SC17: Ability to conceive, calculate, design, integrate into buildings and urban complexes, and execute building structures (T).

SC67: Use of English, level B2, to a sufficient level for the scientific and academic terminology typically used in architecture.

EDUCATIONAL ACTIVITIES

EDUCATIONAL ACTIVITIES	Total number of hours: 112.5
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AF1	Attendance and participation in theoretical classes	X	25 hours
AF2	Attendance and participation in practical classes	X	20 hours
AF3	Dedication to individual and/or group assignments	X	15 hours
AF5	Participation in seminars	X	10 hours
AF6	Personal study and work	X	42.5 hours

Successful completion of the course requires full attendance and the submission of a final project at the end of the term.

BIBLIOGRAFY

Bibliography:

Class notes.

Excel 2016 Bible. John Walkenbach. Wiley, 2015

Excel 2019 Bible. Michael Alexander, Dick Kusleika (previously by John Walkenbach) Wiley, 2018. [Find it in the Library](#)

Excel VBA programming for dummies. John Walkenbach. Wiley, 2013. [Find it in the Library](#)

Excel 2010: curso práctico. Teaching Soft Group (Madrid), 2011. [Find it in the Library](#)

Numerical analysis. R. Burder, J. Faires. Brooks, 2001. [Find it in the Library](#)

Tutorials and Information in Internet :

www.excel-easy.com

www.excelmadeeasy.com

www.exceltotal.com

To translate function names from English to Spanish

<https://www.perfectxl.com/excel-glossary/what-is-excel-function/translations-english-spanish/>



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