

30300 - Mathematics I

Información del Plan Docente

Academic Year	2018/19
Subject	30300 - Mathematics I
Faculty / School	110 - Escuela de Ingeniería y Arquitectura
Degree	438 - Bachelor's Degree in Telecommunications Technology and Services Engineering
ECTS	6.0
Year	1
Semester	First semester
Subject Type	Basic Education

Module

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

4.2.Learning tasks

4.3.Syllabus

Theoretical and practical classes

- Real numbers and complex numbers
- Limits and continuity of functions of several variable
- Differential calculus of functions of several variables

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- Complex functions: limits and continuity.
- Differentiability of complex functions.
- Real and complex series
- Power series. Taylor series.

Laboratory Practice

- Complex numbers.
- Functions of one variable.
- Functions of several variables.
- Numerical methods for solving nonlinear equations.
- Numerical methods for solving systems nonlinear equations.

4.4.Course planning and calendar

4.5.Bibliography and recommended resources