

# COURSE DETAIL

## NUMERICAL METHODS

**Country**

Spain

**Host Institution**

Carlos III University of Madrid

**Program(s)**

Carlos III University of Madrid

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Mathematics

**UCEAP Course Number**

114

**UCEAP Course Suffix**

C

**UCEAP Official Title**

NUMERICAL METHODS

**UCEAP Transcript Title**

NUMERICAL METHODS

**UCEAP Quarter Units**

5.00

**UCEAP Semester Units**

3.30

### **Course Description**

This course discusses different concepts of numerical analysis including algorithms, stability, accuracy, and efficiency. Topics include: errors, algorithms, and estimates; nonlinear equations and nonlinear systems; methods for linear systems of equations; polynomial interpolation--Lagrange, Hermite, piecewise, and splines; numerical quadrature and differentiation.

Prerequisites: Linear Algebra, Differential Calculus, Integral Calculus, and Programming.

### **Language(s) of Instruction**

English

### **Host Institution Course Number**

18262

### **Host Institution Course Title**

CÁLCULO NUMÉRICO

### **Host Institution Course Details**

<https://aplicaciones.uc3m.es/cpa/generaFicha?est=362&anio=2022&plan=433&asig=18...>

### **Host Institution Campus**

Leganés

### **Host Institution Faculty**

Escuela Politécnica Superior

### **Host Institution Degree**

Grado en Matemática Aplicada y Computación

### **Host Institution Department**

Departamento de Matemáticas

**Course Last Reviewed**

2022-2023

[Print](#)