

# 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**

D

**UCEAP Official Title**

NUMERICAL METHODS

**UCEAP Transcript Title**

NUMERICAL METHODS

**UCEAP Quarter Units**

5.00

**UCEAP Semester Units**

3.30

### **Course Description**

This course offers a study of Numerical Methods (NM) to calculate approximate solutions of mathematical models. Topics include: floating point, errors, stability, and algorithms; solution of linear systems of equations; numerical solution of equations and systems of nonlinear equations; interpolation and approximation of functions; least squares problems; numerical optimization; numerical integration; numerical differentiation; fast Fourier transform.

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

English

### **Host Institution Course Number**

16493

### **Host Institution Course Title**

NUMERICAL METHODS

### **Host Institution Campus**

Leganés

### **Host Institution Faculty**

Escuela Politécnica Superior

### **Host Institution Degree**

Grado en Ciencia e Ingeniería de Datos

### **Host Institution Department**

Departamento de Matemáticas

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