# **COURSE DETAIL**

## **MATHEMATICAL OPTIMIZATION FOR ECONOMICS**

## **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)**

**Economics** 

### **UCEAP Course Number**

111

### **UCEAP Course Suffix**

Ε

#### **UCEAP Official Title**

MATHEMATICAL OPTIMIZATION FOR ECONOMICS

## **UCEAP Transcript Title**

MATH OPTIMZATN/ECON

### **UCEAP Quarter Units**

2.50

#### **UCEAP Semester Units**

### **Course Description**

This course applies mathematical optimization to the analysis of economic problems. Topics include: optimization without constraints-- optimization in open sets and global extrema of concave/convex functions; optimization with equality constraints-- local and global relative extremum and economic interpretation of the Lagrange multipliers; optimization with inequality constraints-- comparative statics, convex programming, and economic interpretation of the Kuhn-Tucker multipliers. \*Previous coursework in Introductory Mathematics for Economics is required. Texts: Alpha C. Chiang y Kevin Wainwright. Fundamental methods of mathematical economics. Mc Graw Hill, 2006. Knut Sydsaeter y Peter J. Hammond. Mathematics for economic analysis. Prentice Hall, 1995.

### Language(s) of Instruction

English

#### **Host Institution Course Number**

13444

#### **Host Institution Course Title**

OPTIMIZACIÓN MATEMÁTICA PARA LA ECONOMÍA

### **Host Institution Campus**

Facultad de Ciencias Sociales y Jurídicas. (Getafe)

## **Host Institution Faculty**

# **Host Institution Degree**

# **Host Institution Department**

Economía

**Print**