

COURSE DETAIL

PROBABILITY

Country

Spain

Host Institution

Complutense University of Madrid

Program(s)

Complutense University of Madrid

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Mathematics

UCEAP Course Number

121

UCEAP Course Suffix**UCEAP Official Title**

PROBABILITY

UCEAP Transcript Title

PROBABILITY

UCEAP Quarter Units

5.00

UCEAP Semester Units

3.30

Course Description

This course studies the principle elements of probability theory. Topics covered include: introduction to probability theory, randomized experiments; probability spaces, conditional probability and independence of events; dimensional random variables (distribution function, discrete and continuous variables, transformations, moments, characteristic function and moment generating function, notable distributions); multidimensional random variables (marginal and conditional distributions, independence, transformations, moments, characteristic function, correlation coefficient, notable distributions); Stochastic convergence (convergence of random variables, relationships and properties, laws of large numbers, central limit theorems). An understanding of analysis and algebra is recommended. Texts: V Quesada & A García Pérez. Lecciones de Cálculo de Probabilidades. Díaz de Santos, 1988. VK Rohatgi. An Introduction to Probability Theory and Mathematical Statistics. Wiley, 1976. R Vélez & V Hernández. Cálculo de Probabilidades 1. UNED, 1995. R Vélez. Cálculo de Probabilidades 2. Ediciones Académicas, 2004.

Language(s) of Instruction

Spanish

Host Institution Course Number

800583

Host Institution Course Title

PROBABILITY

Host Institution Campus

Facultad de Ciencias Matemáticas, Campus Ciudad Universitaria

Host Institution Faculty

Host Institution Degree

Host Institution Department

Departamento de Estadística e Investigación Operativa

[Print](#)