

**COURSE DATA****Data Subject**

Code	46957
Name	Ecuaciones diferenciales con incertidumbre y modelización
Cycle	Master's degree
ECTS Credits	3.0
Academic year	2024 - 2025

Study (s)

Degree	Center	Acad. Period
2183 - Master's Degree in Mathematical Research	Faculty of Mathematics	1 First term

Subject-matter

Degree	Subject-matter	Character
2183 - Master's Degree in Mathematical Research	5 - Specialty in applied mathematics	Optional

SUMMARY

English version is not available

PREVIOUS KNOWLEDGE**Relationship to other subjects of the same degree**

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

**English version is not available****WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Development of group work	15,00	0
Development of individual work	30,00	0
TOTAL	75,00	

TEACHING METHODOLOGY**English version is not available****EVALUATION****English version is not available****REFERENCES****Basic**

- Modeling with Itô Stochastic Differential Equations (E. Allen)
- Random Differential Equations in Science and Engineering (T.T. Soong)
- An Introduction to Stochastic Processes with Applications to Biology. (L.J.S. Allen)
- Numerical Solution of Stochastic Differential Equations (P.E. Kloeden, E. Platen)
- Modern Nonlinear Equations (T.L. Saaty)
- Stochastic Finite Elements: A Spectral Approach (R.G. Ghanem, P. Spanos)
- Numerical Methods for Stochastic Computations : A Spectral Method Approach (D. Xiu)
- Elementary Stochastic Calculus with Finance in View (T. Mikosch)
- Statistical Inference (G. Casella, R.L. Berger)
- Introduction to Probability Models (S.M. Ross)