

**COURSE DATA****DATA SUBJECT**

**Code:** 42218  
**Name:** Stochastic processes (extension)  
**Cycle:** Master's Degree  
**ECTS Credits:** 6  
**Academic year:** 2025-26

**STUDY (S)**

Degree	Center	Acad. year	Period
2081 - Master's Degree in Banking and Quantitative Finance	Facultat d'Economia	2	Annual

**SUBJECT-MATTER**

Degree	Subject-matter	Character
2081 - Master's Degree in Banking and Quantitative Finance	Optional subjects	ELECTIVES

**COORDINATION**

TORRO I ENGUIX HIPOLIT

**SUMMARY****PREVIOUS KNOWLEDGE****RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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

**OTHER REQUIREMENTS****COMPETENCES / LEARNING OUTCOMES****DESCRIPTION OF CONTENTS**

1.



2.

3.

4.

5.

6.

## WORKLOAD

### PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Computer classroom practice	15,00
Classroom practices	15,00
<b>Total hours</b>	<b>60,00</b>

### NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	0,00
Preparation of lessons	0,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
<b>Total hours</b>	<b>0,00</b>

## TEACHING METHODOLOGY

## EVALUATION



## REFERENCES

- La referencia principal es el libro Shreve, S. (2000): Stochastic Calculus for Finance. Cambridge. Sin embargo, hay temas preparados con material de los siguientes libros: Applebaum, D. (2004): Lèvy Processes and Stochastic Calculus. Cambridge. Apostol, T. (1974): Mathematical Analysis, 2nd Edition. Addison-Wesley. Ash, R. (1972): Measure, Integration and Functional Analysis. Academic Press. Cont, R. and P. Tankov (2004): Financial Modelling With Jump Processes. Chapman and Hall Durrett, R. (1999): Essentials of Stochastic Processes. Springer. Davidson, J. (1994): Stochastic Limit Theory. Oxford. Lamberton, D. And B. Lapeyre (1996): Introduction to Stochastic Calculus applied to finance. Chapman & Hall. Mikosch, T. (1998): Elementary Stochastic Calculus. World Scientific. Munroe, M. (1953): Measure and Integration. Addison-Wesley. Ross, S. (1996): Stochastic Processes. Wiley. Schilling, R. (2005): Measures, Integrals and Martingales. Cambridge. Steele, JM (2000): Stochastic Calculus and Financial Applications. Springer.