Direzione Ricerca,
Innovazione e
Internazionalizzazione

UNIVERSITÀ
DI TORINO

ID

VP_140_MAT

Visiting Professor Program
Academic Year 2025/2026

TEACHING COMMITMENT: 16 hours

COURSE TITLE

Stochastic Processes

TEACHING PERIOD

II semester

SCIENTIFIC AREA

Probability

LANGUAGE USED TO TEACH

English

COURSE SUMMARY

The course aims to provide students with the skills to use diffusion processes to model various practical scenarios of interest. The first main topic will be Brownian motion, including its construction, main properties, and characterization. The second main topic will focus on diffusion processes, their characterization, and their analysis in the presence of boundaries.

LEARNING OBJECTIVES

By the end of the course, students will be able to analyze stochastic models of practical interest. They will have knowledge of important classes of stochastic processes and the ability to study their main functionals and characteristics. Furthermore, students will be equipped to apply both theoretical and practical techniques to solve problems related to the modeling of stochastic processes.

OTHER ACTIVITIES BESIDE THE COURSE

VISITING PROFESSOR PROFILE

The Visiting Professor will have a high quality profile in terms of research production and previous expertise in teaching stochastic processes and probability according to international standards of quality. Affiliation to a prestigious academic institution will also constitute a preferential feature.

CONTACT REFERENT

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