UNIVERSITÀ DI TORINO

ID

VP077_MAT

Visiting Professor Program
Academic Year 2023/2024

TEACHING COMMITMENT: 16 hours

COURSE TITLE
Stochastic Processes

TEACHING PERIOD
2nd term

SCIENTIFIC AREA
Probability

LANGUAGE USED TO TEACH
English

COURSE SUMMARY
The course module will cover one of the following topics:
- Brownian Motion and its main features (BM as Gaussian process, as a martingale, as a diffusion process; main properties of the sample paths)
- Introduction to one-dimensional diffusion processes (continuity of the sample paths, Dynkin condition, backward and forward Kolmogorov's equations, stationary solution, classification of the boundaries, examples of diffusion processes and diffusion approximations)

LEARNING OBJECTIVES
The students will possess, by the end of the module, basic knowledge of the covered topics and independence in surveying the specific literature.

TUTORSHIP ACTIVITIES
N/A

LAB ACTIVITIES
N/A

OTHER ACTIVITIES BESIDES THE COURSE
Seminar for research fellows

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

CONTACT REFERENT
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