

A review of probability theory foundations

ECTS : 0

Volume horaire : 15

Description du contenu de l'enseignement :

- Random variables, expectations, laws, independence
- Inequalities and limit theorems, uniform integrability
- Conditioning, Gaussian random vectors
- Bounded variation and Lebesgue-Stieltjes integral
- Stochastic processes, stopping times, martingales
- Brownian motion: martingales, trajectories, construction
- Wiener stochastic integral and Cameron-Martin formula.