- Faculté des sciences
- www.unine.ch/sciences

Probability and stochastic processes (3ST2001)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en statistique	**Cours: 2 ph** **TP: 2 ph**	**controle continu: 1**	6

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Automne

Equipe enseignante:

Lecturer: Dr Hugues Mercier
Teaching assistant: Edouard Strickler

Objectifs:

The student is able to master the basic tools from probability theory and stochastic processes that are useful in numerous applications

Contenu:

1. Counting and combinatorics
2. Axioms of probability
3. Conditional probability and independence
4. Random variables
5. Continuous random variables
6. Jointly distributed random variables
7. Limit theorems
8. Elementary Markov chains theory

Forme de l'évaluation:

Continuous assessment with a two-hour written examination during the last week of the semester.
Makeup examinations: June or August-September of the same year (two-hour written examination organised directly with the lecturer).

Documentation:

Sheldon M. Ross. A First Course in Probability, Ninth Edition, Pearson Education Limited, 2014.