MASTER OF SCIENCE IN WEALTH MANAGEMENT
MAÎTRISE UNIVERSITAIRE EN GESTION DE PATRIMOINE

FINANCIAL ECONOMETRICS (S413056)
Prof. Olivier SCAILLET
6 ECTS
Semester: Fall
Teaching language: English

Objective

- Develop the necessary econometrics tools for financial applications
- Applications of parametric and non-parametric statistics
- Implementation of econometrics tools through MATLAB

Description

The course will develop the econometrics tools and models in the context of financial markets in static and dynamic environment.

The first part will covers static models and tools such as CAPM, APT, Value at Risk, Expected Shortfall and scoring procedure, while the second part will focus on dynamic analysis build around ARMA models, GARCH models and Stochastic volatility models. Thorough the course, statistical tools such as linear regression, asymptotic theory, non-parametric estimation and bootstrap procedure will be discussed in detail. Illustration will be discusses in class. The seminar will implement those methods within the framework of MATLAB

The seminar is part of the course and mandatory.

Assessment

Written exam.
Final grade = 70% exam + 20% Max (project, exam) + 10% Max (participation seminars, exam)