

FINANCIAL ECONOMETRICS



Niveau
d'étude
BAC +5



Composante
Ecole
d'économie
de la
Sorbonne
(EES)



Volume
horaire
18h



Période de
l'année
Automne

En bref

- > **Langue(s) d'enseignement:** Anglais
- > **Méthodes d'enseignement:** En présence
- > **Forme d'enseignement :** Cours magistral
- > **Ouvert aux étudiants en échange:** Non

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Description

Summary: This course is devoted to times series:

- First, taken separately, with the treatment stationary dynamics (ARMA models), with potential heteroskedasticity (ARCH effects) and non-linearity (STR Models).

- Second, in a multivariate approach, with standard linear models (VAR models and VECM ones in case of cointegration, possibly included in dynamic networks). Principles of Difference-in Difference (causal) analyses are recalled.

Professor : Catherine Bruneau (Professor of Economics - University Paris 1 Panthéon-Sorbonne)

Student assessment: Final exam (50%) + numerical implementation related to one of the topics of the course (50%)

Pré-requis obligatoires

Prerequisite (summer) reading: stationary ARMA, VAR, ARCH models, Unit Root tests

Syllabus

1.1 Stationarity ARMA and VAR (review) (*Session 1& 2*)

1.2 Introduction to ARCH models (review) (*Session 3*)

1.3 Difference-in-Difference analysis (*Session 4*)

1.4 Introduction to non-linear models: the case of STR models (*Session 5*)

1.5 Multivariate systems (*Session 6*)

Infos pratiques

Campus

› Maison des Sciences Économiques