

- Faculté des sciences économiques
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Applied Macroeconometrics (5AF2017)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en économie appliquée	Cours: 4 ph	Voir ci-dessous	6
Master en finance	Cours: 4 ph	Voir ci-dessous	6

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

Période d'enseignement:

- Semestre Automne

Equipe enseignante

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Contenu

This course gives an introduction on two relevant topics in applied macroeconometrics: data analysis and forecasting. Students get to know and interpret the most important indicators used to track macroeconomic outcomes. They will also use forecasting methods to predict the future evolution of the macroeconomy. We will discuss univariate, multivariate, and big data methods. A substantial part of the course is devoted to implementing the techniques with actual data (bring your own laptop if you want). The applications will be conducted in the free statistical software R and the graphical interface RStudio, which are both available in the computer lab.

Forme de l'évaluation

Mixed assessment: Term paper on an empirical application (30%); 2-hour written exam during the exam session (70%). No documents or connected devices are allowed during the exam, except a formula sheet provided on the exam, a non-programmable calculator and a non-electronic dictionary (translation of words from your language to English and vice versa). In case of violation of these rules, students are in situation of fraud and the unauthorized items will be removed. The exam could be deemed as failed. In case of online exam: 1.5h, open book exam.

Modalités de rattrapage

2-hour written exam during the exam session (100%). No documents or connected devices are allowed during the exam, except a formula sheet provided on the exam, a non-programmable calculator and a non-electronic dictionary (translation of words from your language to English and vice versa). In case of violation of these rules, students are in situation of fraud and the unauthorized items will be removed. The exam could be deemed as failed. In case of online exam: 1.5h, open book exam.

Documentation

Slides, and commented R codes. Textbooks and research articles as background readings. References available on the slides on moodle.

Pré-requis

Basic training in macroeconomics (IS-LM, open economy macroeconomics) and macroeconomic statistics and econometrics (mean, variance, correlation, linear regression), is a prerequisite. Knowledge in programming with a statistical software, in particular R, is an advantage.

Forme de l'enseignement

Weekly lecture with exercises and interactive applications in the computer lab.

Objectifs d'apprentissage

Au terme de la formation l'étudiant-e doit être capable de :

- Evaluate forecasting models
- Apply econometric techniques for data analysis, forecasting, and policy evaluation
- Prepare report on applied macroeconomic project
- Interpret macroeconomic data

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Compétences transférables

- Organise work on written academic report
- Communicate an econometric result to a non-expert public