

Advanced Macroeconometrics

ECTS : 3

Description du contenu de l'enseignement :

1. Identifying the Business Cycles
2. Shock Identification with Structural VARs
3. Non-linear Structural VARs
4. Local Projection Methods versus SVAR
5. Non-linear Local Projection Methods
6. Narrative and High-Frequency Identification Methods

Compétence à acquérir :

The objective of the course is to provide students with the econometric background necessary for an in-depth understanding of the results presented in recent scientific articles and for the realization of a personal economic analysis using the usual macroeconomic tools. The course provides applications of econometrics tools using STATA routines and Matlab Toolboxes.

After having attended the classes, the students will be able to (i) apply time series tools to compose the cycle and trends in time series, (ii) to identify shocks and their economic effects using various techniques, (iii) to interpret the results in light of macroeconomic theory, and (iv) to perform these empirical applications while understanding the underlying analytics of econometric tools.

Mode de contrôle des connaissances :

Mini-project: Students must select an article published in a top journal using one of the methods presented in the course. It is advisable to choose an article for which replication files are available online. The students will then replicate one of the main results of the article and perform a robustness analysis by modifying an element of the analysis that could concern for example the data used or the econometric tool used. The results will be presented and analysed in a short report written in LaTeX that supplements the codes written by the students.

Bibliographie, lectures recommandées :

Canova, F. (2011). Methods for applied macroeconomic research. Princeton university press.

Canova, F., Ferroni, F. (2020). A hitchhiker guide to empirical macro models, documentation for the empirical macro toolbox <https://sites.google.com/view/fabio-canova-homepage/home/empirical-macro-toolbox>

Cochrane, J. H. (2005). Time series for macroeconomics and finance. Manuscript, University of Chicago, 1-136.

Hamilton, J.D. (1994). Time Series Analysis. Princeton University Press.

Document susceptible de mise à jour - 05/04/2026

Université Paris Dauphine - PSL - Place du Maréchal de Lattre de Tassigny - 75775 PARIS Cedex 16