MASTER 2

research

Economic Analysis
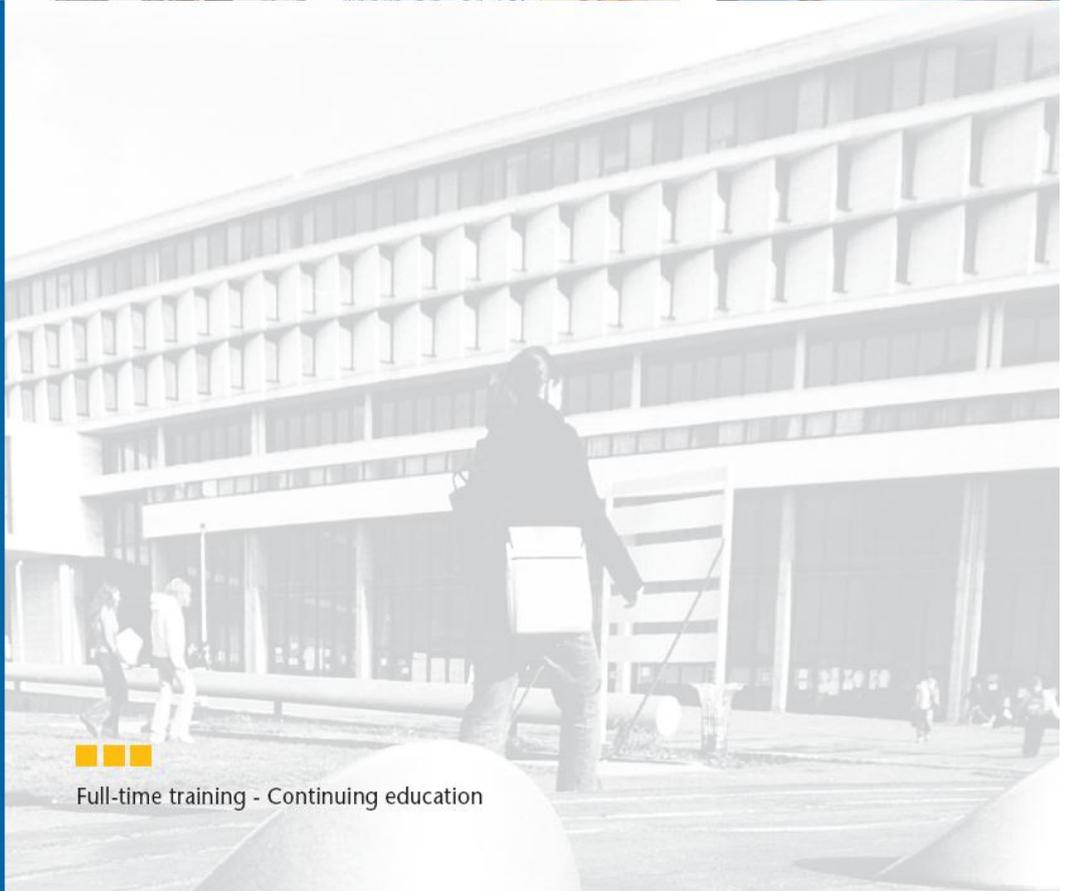
Content of courses

Full-time training - Continuing education

Master 2 Economic Analysis

Content of courses
Academic year 2017-2018

Introduction to Microeconomics (Peter Vida)

This is a four-week introductory course in microeconomics. We study the microeconomic theory of individual decision making, first in a general setting, and then in the particular settings of consumption and production decisions.

Mathematics for Economics (Marius Ochea)

This class introduces the student to the essential mathematical concepts and notation they are most likely to encounter in reading research articles in economic theory. Selected topics: Calculus and Multivariate Calculus. Unconstrained and Constrained Optimization. Linear Algebra. Correspondences and Fixed Points. Differential Equations.

Econometrics (Olivier Donni)

Finite Sample Properties of Ordinary Least Squares. Large Sample Properties with Random Sampling. Instrumental Variable Methods. Maximum Likelihood Methods. Topics in Time Series.

Game Theory (Peter Vida)

Main concepts and tools of game theory. Representation of games in extensive and in strategic forms. Equilibrium concepts: dominant strategies, iterative elimination of dominated strategies, rationalizable strategies, and Nash equilibrium. Strategic interaction under incomplete information and players' uncertainty about some game parameters. Indeterminacy in games in extensive form and Nash equilibrium refinements.

Macroeconomics (Olivier Charlot)

The Solow growth model . Empirical investigations on economic growth/growth and human capital. Optimal growth: the Ramsey growth model. The OLG model. Endogeneous growth, AK model. Endogeneous technical change

Microeconomics (Gabriel Desgranges)

General Equilibrium. Introductory Examples. The two Theorems of Welfare Economics. Existence and Uniqueness. Risk and Uncertainty. Decision under uncertainty. GE under uncertainty.

Advanced Macroeconomics (Frédérique Bec)

This course proposes an overview of current economic fluctuations theories, with a special focus on the inflation-unemployment tradeoff from Dynamic Stochastic General Equilibrium (DSGE) models. The resolution and simulation, as well as the qualitative and quantitative evaluations of such models under rational expectations hypothesis are discussed thoroughly. Finally, optimal stabilization policies are discussed within this setup.

Advanced Microeconomics (Anastasios Dosis, Thomas Trégouët)

In this course, we will study a number of ways in which actual markets fail to result in Pareto optimal allocations. These failures can be "corrected" by man-made solutions. However, we will also see that presence of asymmetric information among the market participants may prevent these solutions from achieving efficiency. This observation will guide us to a formulation where we can address informational asymmetries as well as their consequences on social interactions.

One course among 2 described below:

Microeconometrics (Arnaud Lefranc)

The course discusses the econometric models used in the analysis of cross-section and panel data. It covers linear and non-linear econometric models, as well as continuous and discrete dependent variables. The main models covered include instrumental variable estimators, linear panel data estimators, models for discrete dependant variables and sample-selection models.

Time Series Analysis (Guillaume Chevillon)

This course covers stationary time-series and then extends the analysis to non-stationary multivariate processes (structural and reduced-form). We shall review a typology of linear dynamic time-series models and focus on the concept of cointegration, as many applications lend themselves to dynamic systems of equilibrium-correction relations. With these statistical tools, we shall consider how to model and forecast macroeconomic and financial systems in practice. Finally we study state-space models.

2 courses among 5 presented below:

Industrial Organization (Regis Renault)

Monopoly power. Price discrimination. Short run price competition. Product differentiation and non price competition. Consumer information and advertising.

International Finance (Cristina Terra)

This course studies the main models of open macroeconomics and international finance, discussing the recent research on the field. The topics covered include: Intertemporal model of the current account; monetary models of exchange rate determination with fixed prices and flexible prices; models of currency crises; portfolio diversification.

International Trade (Pamela Bombarda)

The course will cover traditional and more recent theories of international trade. Ricardian and Hecksher-Ohlin models, its extension to many goods and factors. Models of trade with imperfect competition. Gravity equations. Trade from the point of view of individual firms.

Labor Economics (Arnaud Lefranc, Radu Vranceanu)

The course discusses selected themes in modern labor economics, focusing onmicroeconomic models and empirical research with relevant policy implications. Topics covered include human capital accumulation, wage determinants, education economics and labor supply. Several macroeconomic issues related to economy-wide employment and unemployment are also discussed.

Public Economics (Pascal Belan, Laurence Jacquet)

This course studies how taxation affects economic behavior (e.g., labor supply, savings decisions) and economic equilibrium (tax incidence). It also discusses the optimality arguments for a wide range of government instruments in the presence of informational imperfections and other distortions. Policies that are studied are: indirect taxation, the taxation of capital, nonlinear taxation of income and the provision of public goods.

Master's Thesis

The master's thesis is a piece of original scholarship, written under the direction of a faculty advisor, on a relevant topic in economics the student is interested in.

Research seminar I: Professors seminar (Laurence Jacquet)

The goal of the "Professor seminar" is to develop critical thinking skills through both seminar participation and writing of referee reports. You have to attend the *Economic Analysis, Econometrics and Finance Seminars* which take place at THEMA (usually) on Thursday. By the end of the term, you should have written a referee report on one of the papers presented in this seminar.

Research seminar II: Students seminar (Laurence Jacquet)

The goal of the "Students seminar" is to develop abilities to make presentation of research papers as well as to develop critical thinking in attending and discussing presentations of other students. Each student makes a total of four presentations in front of other students and professors. In two of these presentations, the student makes an overview of a few research papers related to the topic of his/her master thesis. In two other presentations, the student focuses on his/her own research outcomes.

	Courses	Hours	Credits
Introductory courses: September			
	Introduction to Microeconomics	20	0
	Mathematics for Economics	20	0
T1: October to December			
	Econometrics	24	3
	Game Theory	24	4
	Macroeconomics	24	3
	Microeconomics	24	3
T2: January to March			
	Advanced Macroeconomics	24	4
	Advanced Microeconomics	24	4
1 course among 2	*Microeconometrics*	24	3
	Time Series Analysis	24	3
	Industrial Organization	24	3
	International Finance	24	3
2 electives among 5	*International Trade*	24	3
	Labor Economics	24	3
	Public Economics	24	3
T3: April to June			
	Master's Thesis		30
	Research Seminar 1: Professor's Seminar	15	
	Research Seminar 2: Student's Seminar	15	